ECONOMIC STATISTICS

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HEARINGS

BEFORE THE

SUBCOMMITTEE ON ECONOMIC STATISTICS

OF THE

JOINT COMMITTEE ON THE ECONOMIC REPORT

CONGRESS OF THE UNITED STATES

EIGHTY-THIRD CONGRESS

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ECONOMIC STATISTICS

MONDAY, JULY 12, 1954

CONGRESS OF THE UNITED STATES,
JOINT COMMITTEE ON THE ECONOMIC REPORT,
SUBCOMMITTEE ON ECONOMIC STATISTICS,
Washington, D. C.

The committee met, pursuant to call, at 10 a. m., in room 1301, New House Office Building, Representative Henry O. Talle (chairman of the subcommittee) presiding.

Present: Representative Henry O. Talle, Senator Frank Carlson, and Representative Richard Bolling.

Also present: Grover W. Ensley, staff director, and John W. Lehman, clerk.

Representative TALLE. The subcommittee will come to order.

Before hearing the witnesses, the Chair would like to make a preliminary statement.

This morning the Subcommittee on Economic Statistics opens 2 days of hearings to provide us with background and counsel for determining those areas of economic statistics in which the subcommittee might most profitably begin intensive study. We are calling before us representatives of the Bureau of the Budget, the Council of Economic Advisers, and a group of distinguished users of economic statistics to assist in the solution of these key statistical areas.

The Joint Committee on the Economic Report has a long history of interest in, and concern for, adequate and accurate economic data for public and private policymaking. As early as July 1948, the Joint Economic Committee, then under the chairmanship of Senator Taft, issued a staff report on current gaps in our statistical knowledge. In succeeding years this report was brought up to date in supplements to the committee's annual report. The committee has also from time to time included consideration of the question of adequate statistical data in connection with special reports dealing with a wide range of economic subjects.

As a culmination of the Joint Economic Committee's interest in the problem of economic statistics, in its report on the 1954 Economic Report of the President (H. Rept. 1256), the committee directed the establishment of a continuing Subcommittee on Economic Statistics—

> to provide the leadership and to supervise the activities of the committee in this whole area.

As chairman of that subcommittee, I view this as a stimulating and challenging opportunity. I am sure my colleagues on the subcommittee, Senator Carlson and Representative Bolling, join in this feeling. It is of utmost importance that the Government provide itself

and the private economy with adequate and accurate economic statistics in order that the most enlightened decisions may be made in the interest of economic stability and growth. We are all aware of the great improvements which have been made in our statistical knowledge, particularly in its timeliness, and are anxious to see these advances preserved and extended. As our economy grows increasingly complex, it is apparent that we must have our needs for statistical information under constant review to make sure that no important segment of statistical knowledge essential for policy decisions is lacking.

In calling Mr. Belcher this morning and Mr. Burns this afternoon, we will learn of the existing economic statistical resources now available in the Federal Government, of the needs which still exist, and of the possibilities for meeting those needs. A group of outstanding and representative economists and statisticians will appear before the subcommittee tomorrow and advise us on the selection of particular areas for intensive investigation, the objectives of an integrated system of Federal economic statistics, and the nature of the standards or tests that could be applied by the subcommittee in evaluating present programs as a preliminary to its own recommendations for further improvement.

These technicians have also been invited to present their observations with respect to the statements of the Bureau of the Budget and the Council of Economic Advisers.

I am asking at this time that there be incorporated in the record the press releases announcing these hearings and listing the invited witnesses.

(The press releases above referred to are as follows:)

CONGRESS OF THE UNITED STATES

JOINT COMMITTEE ON THE ECONOMIC REPORT

Representative Henry O. Talle, chairman of the Subcommittee on Economic Statistics, of the Joint Committee on the Economic Report, has released the attached statement of the subcommittee's plans and procedures.

CONGRESS OF THE UNITED STATES,
JOINT COMMITTEE ON THE ECONOMIC REPORT,
June 1, 1954.

PLANS AND PROCEDURES OF THE SUBCOMMITTEE ON ECONOMIC STATISTICS

The Subcommittee on Economic Statistics of the Joint Committee on the Economic Report has agreed to the following plans and procedures:

As a first step, the subcommittee is seeking the views of Dr. Arthur F. Burns, Chairman of the Council of Economic Advisers as to the statistical needs of the Council in carrying out its responsibilities under the Employment Act of 1946. At the same time, the Bureau of the Budget, in response to the Subcommittee's request, is preparing a statement on the objectives and current status of Federal statistical programs. (Copies of the letters sent to the Council and the Budget Bureau are attached.)

The subcommittee plans also to ask a panel of distinuished users of economic statistics to advise the subcommittee on the selection of particular areas for intensive investigation, as well as the objectives of an integrated system of Federal economic statistics and the standards or tests that should be applied by the subcommittee in evaluating present programs as a preliminary to its own recommendations for further improvement. It is not planned to take up more than one or two areas at a time. Final decisions on the areas which the subcommittee will wish to start its work will not be made until after the sub-

committee has had the benefit of the statement from the Council of Economic Advisers and the Bureau of the Budget and has heard the panel referred to above. Under consideration at this time for possible early examination are statistics on savings, inventories and sales, and construction. The subcommittee will report to the full committee its findings with respect to each area as well as its recommendations for committee action.

The executive agency or agencies with jurisdiction over a particular area will be asked to provide the subcommittee with information as to basic concepts, particularly as they relate to the Employment Act requirements; how present data are collected and processed; the uses and limitations of present and potential series; their relation to the overall system of economic statistics, both Government and privately produced; and recommendations for improvements in coverage, in efficiency of collecting or processing, and in analysis and presentation. These materials will be made available for review and comment by other Government analysts and private experts.

As was pointed out in the original release of April 16 setting up the subcommittee, the Joint Economic Committee from the date of its organization in 1947 has taken the lead in calling attention to statistical gaps and has given support to measures to improve our statistical knowledge. The establishment of a Subcommittee on Economic Statistics (as provided in H. Rept. 1256, 83d Cong., 2d sess.) is further evidence of the joint committee's continuing interest in the field of economic statistics. It is, of course, well recognized that Government statistics have made important gains over the last 25 years. The subcommittee is eager to see these gains preserved while at the same time working toward extending them in the direction of greater efficiency, improved coverage, more effective use of existing sources, better public understanding of Government statistics, etc. The subcommittee believes that one of its most important tasks is to conduct its examinations and frame its recommendations from the point of view that each statistical program should be an integral part of a coordinated general system of Federal economic statistics.

In addition to the series of intensive studies mentioned above, the subcommittee has asked the staff to keep up with and report on improvement programs currently under way, such as the work being done, in line with the committee's recommendations in House Report 1256, on labor force, employment, and unemployment statistics. The staff has also been requested to sponsor a review of Economic Indicators which is now under way.

Representative HENRY O. TALLE, Iowa, *Chairman*,
Senator FRANK CARLSON, Kansas,
Representative RICHARD BOLLING, Missouri,
Subcommittee on Economic Statistics.

MAY 27, 1954.

DR. ARTHUR F. BURNS,
Chairman, Council of Economic Advisers,
Washington, D. C.

DEAR DR. BURNS: As you know, the Joint Economic Committee recently created a Subcommittee on Economic Statistics. Preliminary to beginning its studies the subcommittee is exploring the status of our Federal economic statistical programs, and their adequacy in light of the objectives and machinery of the Employment Act of 1946. Attached is copy of an inquiry addressed to Rowland R. Hughes, Director, Bureau of the Budget.

The subcommittee would also appreciate hearing from the Council, recalling those sections of the Employment Act (secs. 4 (c) and (e)) which outline the responsibility and function of the Council: "to gather timely and authoritative information concerning economic developments and economic trends, both current and prospective, to analyze and interpret such information in the light of the policy declared in section 2 for the purpose of determining whether such developments and trends are interfering, or are likely to interfere, with the achievement of such policy, and to compile and submit to the President studies relating to such development and trends; * * *

"* * * the Council shall, to the fullest extent possible, utilize the services, facilities, and information (including statistical information) of other Government agencies as well as of private research agencies, in order that duplication of effort and expense may be avoided."

In light of these statutory responsibilities, would you give the subcommittee the Council's thinking as to the current adequacy of the Government's statistical programs from the standpoint of the Council's ability to assist the President to analyze economic trends and formulate economic policies?

It would also be helpful to learn of the steps the Council has taken within the last year to improve statistical programs, and the steps you plan to take in the coming months, in addition to advising as to the areas that should come under the subcommittee's scrutiny in the immediate months ahead.

We would appreciate having your statement by the end of June so that the committee can review the materials before the recess, preliminary to preparing its plans for the balance of the year. We realize it is difficult to be concrete and specific on such matters but believe that progress can only be made by constantly trying to refine and mark out the problem areas.

The statistical agencies of the executive branch and the legislative committees of Congress look to the Council and the committee for leadership in setting forth the statistical needs relating to the Employment Act. I am sure with our two agencies working together we can continue to make improvements in our economic statistical programs.

Sincerely yours,

HENRY O. TALLE,
Chairman, Statistics Subcommittee.

APRIL 28, 1954.

MR. ROWLAND R. HUGHES,
Director, Bureau of the Budget,
Washington, D. C.

DEAR MR. HUGHES: As you know, the Joint Committee on the Economic Report has recently established 2 subcommittees, 1 of which is a Subcommittee on Economic Statistics. The membership and functions of these subcommittees are described in the attached release. In preparation for the work of the Subcommittee on Economic Statistics, and for the information of our members generally, it would be very helpful if you could provide a memorandum setting forth certain information concerning our present economic statistical programs.

(1) What is the role of the Federal Government in providing economic statistics? How does our present statistical information compare with that available in the 1920's or during the great depression of the thirties? How do the economic statistics provided by our Federal Government compare with those of foreign countries? In addition to the Government statistics or private statistics now used and published by the Government, are there other privately produced statistics which should be made more widely available because of their usefulness in economic analysis for policymaking?

(2) It would be helpful if we could have as general background for all the subcommittee deliberations a tabular summary listing the Federal agencies producing economic statistics and their location in Government, the chief function of those agencies, the major statistical series they produce, and the amount their budgets regularly devote to statistical work.

(3) Later this year, and probably each year thereafter, the subcommittee will have need of a complete statement on the major Federal economic statistical programs provided for or proposed in the President's budget or in separate messages to the Congress. At this date it will be sufficient if you can note where substantial changes occur over last year and the funds being requested for these changes. Why are the changes necessary at this time in the opinion of the Bureau? Do any of these proposed changes in programs or in budget provide for new operations or additions to the Federal statistical programs or are they on what might be termed "maintenance" and "repair" projects intended only to maintain the effectiveness of existing series?

(4) What is the present status of each of these proposals? Have any of these programs been proposed to the Congress previously with the Bureau's approval but turned down by the Congress? Have they been proposed previously by the agencies but approval by the Bureau of the Budget withheld?

(5) Are there other projects or proposals concerning existing Federal statistical programs or series which the Bureau believes to be essential for the efficiency, reliability, and accuracy of existing series or to plug gaps in existing programs? What are the limitations to the initiation of these programs?

I hope that we may have this information for early presentation to the subcommittee. Please feel free to supplement the requested data with any other information you feel will be helpful to the subcommittee.

Very truly yours,

HENRY O. TALLE,
Chairman, Statistics Subcommittee.

CONGRESS OF THE UNITED STATES

JOINT COMMITTEE ON THE ECONOMIC REPORT

SUBCOMMITTEE ON ECONOMIC STATISTICS ANNOUNCES HEARINGS

Representative Henry O. Talle (Republican, Iowa), chairman of the Subcommittee on Economic Statistics of the Joint Committee on the Economic Report, today made the following announcement of a 2-day series of exploratory hearings on economic statistics:

"The Subcommittee on Economic Statistics is calling upon representatives of the Bureau of the Budget, the Council of Economic Advisers, and a group of distinguished users of economic statistics to assist in the selection of key statistical areas which are in most urgent need of intensive study by the subcommittee. Rowland R. Hughes, Director of the Bureau of the Budget, who is preparing at our request a statement on the objectives and current status of the economic statistical programs of the Federal Government, will be asked to present a summary of these materials at the opening of the hearings on Monday, July 12.

"The Council of Economic Advisers has had underway an examination of economic statistics from the standpoint of the Council's needs in assisting the President to analyze economic trends and formulate economic policies. These views will be presented to the subcommittee by Arthur F. Burns, Chairman of the Council, in the afternoon of the same day.

"With the Council and Budget Bureau statements on current statistical resources and needs as a background, the subcommittee has asked a number of outstanding and representative economists and statisticians to appear during the morning and afternoon of July 13 to provide information for the guidance of the subcommittee on the selection of areas for the subcommittee's scrutiny in the months immediately ahead, the determination of objectives of an integrated system of Federal economic statistics, and the nature of the standards or tests which should be applied by the subcommittee in evaluating present programs as a preliminary to its recommendations for further improvement.

"Each expert is invited to present his observations particularly with respect to—

"1. The views of the Bureau of the Budget and the Council of Economic Advisers, as submitted in their prepared statements and discussions with the subcommittee.

"2. The general concept of an overall system of economic statistics.

"3. Any significant weaknesses in major existing statistical series as to concepts, accuracy, timing, collections, procedures, etc.

"4. Gaps in the Nation's economic statistics and suggestions for closing those gaps.

"5. The kind of statistics and other economic information specifically needed in analyzing the economic plans and expectations of consumers, government, and business.

"The schedule of the 2 days' meetings and a list of persons invited is attached. Other persons desiring to comment at this stage of the subcommittee study are urged to submit their written observations for possible incorporation in the printed record and with the understanding that they may be called later as witnesses on specific subjects or be asked to prepare special memorandums for subcommittee consideration."

Representative HENRY O. TALLE, Iowa, *Chairman*,
Representative RICHARD BOLLING, Missouri,
Senator FRANK CARLSON, Kansas,
Subcommittee on Economic Statistics.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
SUBCOMMITTEE ON ECONOMIC STATISTICS,
June 16, 1954.

SCHEDULE OF HEARINGS

(NOTE.—All hearings are open to the public.)

Monday, July 12

10 a. m.—Room 1301, New House Office Building.
Rowland R. Hughes, Director Bureau of the Budget.
2:30 p. m.—Room 1301, New House Office Building.
Arthur F. Burns, Chairman, Council of Economic Advisers.

The following persons have been invited to appear before the subcommittee, with a view to covering a substantial number of the major areas of economic activity and knowledge. Each expert has been asked to comment on economic statistics in general and more particularly with respect to an area or areas in which he has special competence.

Tuesday, July 13

9:30 a. m.—Room 1301, New House Office Building:	*Area of special comment*
Martin Gainsbrugh, chief economist, National Industrial Conference Board, Inc., New York, N. Y.	General concepts.
Stephen M. Du Brul, executive in charge, business research staff, General Motors Corp., Detroit, Mich.	Industry.
Boris Shishkin, research director, American Federation of Labor, Washington, D. C.	Labor.
Paul W. McCracken, professor of economics, University of Michigan, Ann Arbor, Mich.	Finance.
Kenneth E. Miller, manager, economic research department, Armour & Co., Chicago, Ill.	
Hazel Kyrk, Washington, D. C., formerly professor of economics, University of Chicago	Agriculture and food. Consumer income and expenditures.
James W. Martin, director, bureau of business research, University of Kentucky, Lexington, Ky.	State and local government.
2 p. m.—1301 New House Office Building:	
Isador Lubin, economic consultant, New York, N. Y.	Labor and foreign economics.
Miles L. Colean, economic consultant, Washington, D. C.	Construction.
Rensis Likert, director, institute for social research, University of Michigan, Ann Arbor, Mich.	Consumer expectations.
Arthur Rosenbaum, manager, economic research department, Sears, Roebuck & Co., Chicago, Ill.	Retail trade.
Irwin Friend, professor of economics, University of Pennsylvania, Philadelphia, Pa.	Savings and investment.
Lester S. Kellogg, director of economic research, Deere & Co., Moline, Ill.	Business and agriculture.

In addition to the persons listed above, the subcommittee is asking Arthur F. Burns, Chairman of the Council of Economic Advisers, Stuart A. Rice, Director of the Office of Statistical Standards of the Bureau of the Budget, and the following representatives of statistics-producing agencies to be present for possible participation:

Ewan Clague, Commissioner, Bureau of Labor Statistics, Department of Labor.
Robert W. Burgess, Director, Bureau of the Census, Department of Commerce.
Louis Paradiso, Assistant Director and Chief Statistician, Office of Business Economics, Department of Commerce.

Winfield W. Riefler, assistant to the Chairman, Board of Governors of the Federal Reserve System.
Oris V. Wells, Administrator, Agricultural Marketing Service, Department of Agriculture.

Representative TALLE. Before we hear from our first witness, Mr. Donald R. Belcher, who will represent Mr. Rowland R. Hughes, the Director of the Budget, perhaps Senator Carlson and Congressman Bolling would like to make some observations in regard to the content and focus of these hearings.

Senator CARLSON. Mr. Chairman, I think this is a very important hearing. I am sure that not only the members of the Joint Economic Committee but the Congress as a whole will be looking to this subcommittee for guidance on the question of the adequacy of economic statistics.

I have never before realized the need for statistics as much as I have during this past session of Congress, and I think, too, of the importance they have not only in Congress but out over the Nation.

As you have indicated, many of these policy decisions to be made in Congress must rely on statistical information as provided by the Federal Government. If there are limitations on this information for any reason, we should know about them, and should try and bring them out during this hearing.

The hearings and other work of this subcommittee are going to be especially helpful to me personally in connection with my responsibilities as chairman of the Senate Post Office and Civil Service Committee. As you know, the Civil Service Committee is charged by the Reorganization Act of 1946 with handling legislative matters and providing surveillance for Government censuses, and the collection of statistics generally. It is going to be most helpful to have the kind of general setting and overall guidance which the studies of this subcommittee will provide.

Mr. Chairman, I want to compliment you for arranging these hearings.

Representative TALLE. Thank you, Senator Carlson.

Representative BOLLING. Mr. Chairman, I would have just a word perhaps to emphasize the obvious. I think it is quite obvious that there is no partisanship whatsoever in this problem of statistics. I feel very strongly that not only are adequate statistics necessary to the decisions that must be made by the Congress and by the Executive, but also that they are of great importance to the individual businessman in a free enterprise economy. I think that the service we hope to perform here is one which certainly should have an impact not only on Government, but also on many private agencies, and I am hopeful that from these hearings there will come a sound critique, valid recommendations and substantial improvements.

Representative TALLE. The Chair is grateful for the comments made by his fellow members of the committee.

At this time, it is a genuine pleasure for me to call upon Mr. Donald R. Belcher, the Assistant Director of the Bureau of the Budget. At the outset I should like to express the appreciation of the committee for the comprehensive statement which the Bureau of the Budget has prepared in response to the committee's letter of April 28 and the materials which have been assembled in connection with this statement. They will all be made a part of the record of this hearing.

(The material referred to is as follows:)

MEMORANDUM ON ECONOMIC STATISTICAL PROGRAMS OF THE UNITED STATES

INTRODUCTION

In a letter of April 28, 1954, Representative Henry O. Talle, chairman of the Subcommittee on Economic Statistics of the Joint Committee on the Economic Report, requested from Mr. Rowland R. Hughes, Director of the Bureau of the Budget, certain information concerning the economic statistics and statistical programs of the United States. This report is in response to that request. Mr. Talle outlined in five paragraphs a series of topics for discussion, including certain specific questions. In this report it has been found convenient to alter somewhat the order in which these topics and questions are examined. It may be helpful at the outset to explain the structure of the report in relation to the queries submitted to the Bureau.

Mr. Talle's paragraph (1) consisted of the following four questions:

> "What is the role of the Federal Government in providing economic statistics? How does our present statistical information compare with that available in the 1920's or during the great depression of the thirties? How do the economic statistics provided by our Federal Government compare with those of foreign countries? In addition to the Government statistics or private statistics now used and published by the Government, are there other privately produced statistics which should be made more widely available because of their usefulness in economic analysis for policymaking?"

The Bureau's discussion of the foregoing questions is contained in the first four subsections of section I.

Paragraph (2) of the Talle letter stated:

> "It would be helpful if we could have as general background for all the subcommittee deliberations a tabular summary listing the Federal agencies producing economic statistics and their location in Government, the chief function of those agencies, the major statistical series they produce, and the amount their budgets regularly devote to statistical work."

The requested tabular summary appears in appendix B. In its preparation only data available to the Bureau of the Budget and included in accessible budget documents have been included. To obtain greater detail would require extensive consultation with the Federal agencies to which funds are appropriated. Apart from the larger general purpose statistical agencies like the Bureau of the Census and the Bureau of Labor Statistics, statistical activities tend to be byproducts of administration or otherwise to be intermixed with regulatory or other executive functions. In these cases, to segregate expenditures for statistics from other expenditure accounts would require rather artificial allocations of joint costs. The amounts presented in appendix B as regularly devoted to statistical work therefore necessarily involve some estimation and some consolidation of estimates.

Paragraph (3) of the Talle letter was as follows:

> "Later this year, and probably each year thereafter, the subcommittee will have need of a complete statement on the major Federal economic statistical programs provided for or proposed in the President's budget or in separate messages to the Congress. A this date it will be sufficient if you can note where substantial changes occur over last year and the funds being requested for these changes. Why are the changes necessary at this time in the opinion of the Bureau? Do any of these proposed changes in programs or in budgets provide for new operations or additions to the Federal statistical programs or are they on what might be termed 'maintenance' and 'repair' projects intended only to maintain the effectiveness of existing series?"

The foregoing information is supplied, so far as now available, in appendix A. Noted therein are all the important changes affecting statistics in the 1955 budget as compared with 1954, together with the actions taken upon them up to the time this is written. It is believed that the character of the proposed changes, whether of maintenance or repair type, is sufficiently indicated by the description of each. The Bureau's opinion of the necessity of the changes is in most cases apparent from the same description.

Paragraph (4) of Mr. Talle's letter asks, referring to the preceding paragraph:

> "What is the present status of each of these proposals? Have any of these programs been proposed to the Congress previously with the Bureau's approval but turned down by the Congress? Have they been proposed previously by the agencies but approval by the Bureau of the Budget withheld?"

The present status of each proposal, so far as known at the time of writing, is indicated in appendix A. All of the programs for improvement included in the 1955 budget have in prior years been proposed by the agencies, approved by the Bureau of the Budget, and included in previous budgets (though not necessarily for the same amounts), but have been turned down by the Congress.

Perhaps the core of Mr. Talle's inquiry appears in his paragraph (5), which is as follows:

> "Are there other projects or proposals concerning existing Federal statistical programs or series which the Bureau believes to be essential for the efficiency, reliability and accuracy of existing series or to plug gaps in existing programs? What are the limitations to the initiation of these programs?"

These questions express the subcommittee's desire for the Bureau's judgment concerning the steps needed to improve the statistical services of the Federal Government. The Bureau's answers are divided into two parts. Several basic and overall statistical needs are discussed in the latter pages of section I of this report. Detailed judgments and recommendations pertaining to important fields which we regard as involved in economic analysis compose section II.

In formulating its report the Bureau of the Budget drew upon a long experience of cooperation with other Federal statistical agencies in the planning of statistical programs and in the coordination of Federal statistical activities generally. Memorandums were prepared by members of the professional staff of the Bureau's Office of Statistical Standards, each answering in his own way the questions raised by Mr. Talle concerning the major needs for improvement of statistics within his own fields of assignment. Believing that these individual views and recommendations, which do not necessarily have the approval of the Bureau, will be of interest to the subcommittee, they are included in appendix D of the report without either change or endorsement.

The principal data-collecting and data-analyzing agencies of the Federal Government are intimately concerned with any discussion of improvements in Federal statistics. It therefore seemed appropriate to seek their opinions. Replies to letters from the Bureau, inviting agency comments, particularly upon the questions raised in paragraph (5) of Mr. Talle's letter, are being separately submitted to the subcommittee in the belief that they have interest.[1]

Readers of this report are informed at many points that improvements in the Federal statistical system which are regarded as desirable by the Bureau of the Budget are obtainable only by additional expenditures of public funds. This does not necessarily imply the Bureau's endorsement of such expenditures. The subcommittee has asked the Bureau to identify the most needed statistical improvement; and these are specified herein. But not all desirable objectives are attainable within a given period of time. If every plan for development were limited to items thought to be immediately within reach, planning itself, except in a hand-to-mouth sense, would be impossible. The program of improvement set forth in this report is to be regarded as a chart of objectives toward which the Federal Government may hope to move as rapidly as circumstances and other competing demands upon it permit.

I

ROLE OF THE FEDERAL GOVERNMENT

Federal responsibilities for providing economic statistics are firmly rooted in the Constitution of the United States. Article 1, section 2, requires a decennial enumeration of the numbers of persons in each State. The population data so obtained are basic to all economic statistics. Moreover, from the decennial census as a seedbed have grown many other inquiries upon the national economy, its structure, functioning and state of health.

The needs of the young American Republic for economic information were recognized by the Founding Fathers. Even before the First Census enumeration of 1790, Alexander Hamilton began the collection in the Treasury Department of statistics on foreign trade. He was keenly aware of the importance of such figures for the development of new industries as well as for trade expansion. A little later, memorials signed among others by Thomas Jefferson sought to enlarge the scope of the Second Census. Provision for "An account of the several manufacturing establishments and manufactures" was included in the act providing for the Third Census of 1810.

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[1] See pp. 85–128.

Throughout American history there has been an "almost constant tendency to expand"[2] these early informational activities. Even without the requirement of a census in article 1 of the Constitution the general welfare clause of its preamble would have supported the constant pressures to obtain more statistical data about the lives, economic opportunities and needs of our people. National growth and prosperity demanded an enlightened conduct of public affairs with the aid of factual information.

The ultimate responsibility of the Federal Government for underwriting the health of the national economy has always been implicit in the American system. An important and essential exercise of this responsibility occurs when citizens are provided with the informational tools they need to make our free enterprise system successful. The obligation of public servants to base public policy upon reliable facts is equally well established and may almost be regarded as an unwritten part of the Constitution.

Thus the Nation's political philosophy recognizes two forms of obligation of the Federal Government to provide economic statistics. It is obligated to use factual data as bases for determining public policy; it is also obligated to provide certain basic facts to its citizens. Facts are needed by people for the management of their own affairs—a personal responsibility which, when wisely exercised, contributes greatly to national well-being.

There are obviously limits to the Government's responsibilities for providing information to the public. How are the respective responsibilities—statistical and otherwise—of Government and of private enterprise to be determined and allocated?

Specific answers to this question may differ according to economic circumstances and the changing currents of opinion. The governing principle is not likely to change: statistics should be provided at the expense of the Federal Government when the national public interest is clearly and importantly affected. But difficulties appear in the application of this principle. Few statistical series on any subject are without some public interest which is regarded by many people as important. "Even a strictly private interest, if shared by a sufficient number of people, becomes of public interest through its implications for the economy."[3] Hence, any question of statistical responsibility is likely to be accompanied by issues involving relative priority among competing claims for Federal expenditure.

Even if the public interest in particular data is undisputed and their priority is high, subordinate questions arise: Is the Federal Government the appropriate public agency to provide these data? Is it preferable that data provided at public expense be collected and compiled by official or by commercial mechanisms?

Another general principle of democratic government may be applied to the first of these subordinate questions: Governmental functions should be centralized only to that degree which will result in the optimum adaptation between the function and the agency which is to exercise it. Stated more simply, public functions should be lodged in the smallest governmental units that are capable of exercising them efficiently. The people are entitled to all of the governmental decentralization that will work, since popular judgments—other things equal—can more easily be formed upon local and State than upon nationwide activities.

In fact, however, the American people have increasingly needed nationwide statistics that only the Federal Government can efficiently provide. The disutility both of local governments and of private enterprise for the collection and tabulation of the most widely used economic statistics may be readily seen by imagining the withdrawal of the Federal Government from some of its present statistical activities.

Suppose, for example, that the Nation depended for population data upon State and municipal authorities or chambers of commerce; for its overall data on industrial production upon the voluntary compilations of the respective industries; for its knowledge of prices upon advertisers; for its data on employment and unemployment upon the membership lists and benefits accounts of labor organizations; for its data on foreign trade upon the shipping pages of the daily press; or was dependent in any of these cases upon any other similar private source. Without nationally standardized definitions, uniform methods of collection, assemblage of reports at a central location, assignment of appropriate

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[2] W. Stull Holt, The Bureau of the Census, The Brookings Institution, Washington, 1929, p. 9.

[3] Problems of Coordinating the United States Statistical System, by Stuart A. Rice, Annual meeting, American Statistical Association, Washington, December 28, 1953.

weights, and assurance of a complete or a standarized sample coverage, any totals or indexes compiled or estimated and any comparisons made from such data would be entirely unreliable and utterly misleading.

This does not imply that statistical activities should be discouraged unless they are undertaken by the Federal Government. On the contrary, States, municipalities, trade organizations, and private associations of many other kinds have appropriate roles to play in the development of a national statistical system under Federal leadership. The Federal Government must provide the necessary economic information that it alone has the resources, the authority, and the prestige to assemble. But it should also encourage, take cognizance of, and utilize whenever practicable information that is collected by local agencies of government and by private organizations.

Not infrequently, State or local governments may serve as agents for the collection of federally needed information, while simultaneously serving their own, more detailed, requirements. An existing instance of cooperation among three levels of government is the collection and analysis by the National Office of Vital Statistics of reports on births, mortality, and disease from State bureaus of vital statistics, which in turn have assembled the basic data from county and city governments.

The interest of the Federal Government and of organized business in economic stability and prosperity are mutually consistent. Their respective statistical activities should be mutually helpful and supplementary. While business is universally dependent upon such information as that obtained in the business censuses and in the nonagricultural employment, hours and earnings inquiries of the Department of Labor, the Federal Government has made use (especially during World War II) of many production series compiled for particular industries by the trade associations serving them.

When should statistical investigations of national interest be undertaken by the Federal Government directly through its own administrative mechanisms? The circumstances in each case should govern. Relatively small and single-time surveys may sometimes with advantage be let out by contract to unofficial research organizations. The case for contracting out a survey is strong if the contractor—for example, a university or market research firm—has specialized skill in the subject matter involved. More often—and invariably if nationwide surveys of census type are required—the Federal Government has no logical competitor for the job. Its facilities of personnel and machine equipment tend to be so superior, its rules for the confidential treatment of business data so strict, and the needs for governmental authentication of the data so important, that Federal agencies alone are in a position to do the work.

The role of the Federal Government in providing economic statistics will always, of necessity, be a changing one. What seems important today may be unimportant tomorrow, and vice versa. Nor is it possible to define with clarity and finality the scope of economic statistics in relation to other kinds of data. For example, the Nation's military defense in its earlier years was quite separable from the state of the national economy. Nor did it require economic statistics as the term would then have been used. Today the world outlook demands an unprecedented state of readiness for mobilization. Such a state of readiness is largely economic and its effects upon the entire economy are wellnigh controlling. Hence it is not inappropriate to place all of the data needed for mobilization and preparedness for mobilization within the category of economic statistics.

COMPARISON WITH THE 1920'S AND 1930'S

The statement quoted on an earlier page that there has been an "almost constant tendency" toward expansion in the Nation's economic statistics requires some qualification. The trend line has been one of constant growth but there have been wide fluctuations around it. Periods of emergency in national life, characterized by spurts forward in Federal statistical activities, have been interspersed by resistance to change or by retrogression.

During the First World War "because of the necessity for bending all the Nation's energies to the single end of winning the war," a Central Bureau of Planning and Statistics was organized in the War Industries Board.[4] The Bureau gave such an impetus to statistical development that it is sometimes said to have launched the modern period in Federal statistics. In particular it took the first

[4] First Annual Report of the Central Statistical Board, Washington, 1935, p. 4. Quotations in this and the following paragraph are from this source.

practical steps toward the coordination of separate and unrelated Federal statistical activities. Its work foreshadowed the ultimate emergence of a Federal statistical *system*. However, in the postwar years that immediately followed "the wartime experiment in coordination * * * came to an end." Nevertheless statistical development continued, notably in the Department of Commerce under its Secretary, Herbert Hoover, who understood the relevance of statistics to business needs. For his notable contributions during this period Mr. Hoover was elected an honorary member of the International Statistical Institute.

The next great crisis in national life—the depression of the 1930's—did not at first induce an expansion or improvement in Federal statistical activities, but rather the reverse. Reductions in Federal agency funds resulting from the Economy Act of 1932 were particularly severe in the case of statistical activities. Statistics as always seemed "useless" to those who lacked an understanding of the functions they served. The relatively few who possess this understanding are frequently inarticulate in expressing it. In consequence, statistical activities were especially vulnerable in the early 1930's when fiscal retrenchment seemed necessary.

However, excesses tend to generate their own correctives. In 1933 the advisory assistance of the American Statistical Association and the Social Science Research Council was officially sought by several Federal departments.[8] A realization grew in the Congress and in high administration circles that sound and positive proposals to combat the depression required analysis based upon reliable information. As a result the temporary retardation of statistical growth was presently checked and statistical expansion was resumed at an accelerated pace.

The ominous shadow of the Second World War found the Federal Government far better prepared with basic information than in 1914. Even more important, the Nation possessed the strength and competence in its peacetime statistical organization to obtain new and unprecedented types of information. Unlike our First World War experience, when a new statistical mechanism was required, national leaders found it possible in 1942 to place basic reliance upon established Federal agencies for the collection of the enormous volume of statistical data without which the war effort could not have been organized and continued.

The relationship between national emergency and statistical development still exists. Statistical retrogression after the war was halted by Korea. The Korean truce was followed by another slump, though there are now again signs of statistical recovery. Time will test the reality of this recovery; but even at its lowest postwar ebb our statistical information has undoubtedly been far superior to that available in the 1920's and 1930's.

COMPARISONS WITH OTHER COUNTRIES

With the largest production and highest income of any nation, the United States would be expected to have the most highly developed economic statistics. There is little doubt that it ranks first in the number and variety of its statistical series. Among 182 tables in the 1953 Statistical Yearbook of the United Nations, 171 contain figures for this country. Canada, France, and the United Kingdom rank second, third, and fourth, with 156, 155, and 147, respectively. A few other countries may be cited for comparison: Figures for India appear in 125 tables, Brazil, 109; Czechoslovakia, 104; Switzerland, 90; Poland, 89; the Dominican Republic, 52; U. S. S. R., 47; Libya, 11; Nepal, 2.

The relative statistical development of these countries cannot be inferred from this comparison, except in a very loose way. The yearbook includes few tables to which all countries could be expected to contribute data, however highly developed statistically. For example, neither the United States nor other northern nations contribute data on the production of coffee and tea (tables 23 and 24) because such production, if it exists at all, is negligible. Nor is it probable that the U. S. S. R., which treats many of its statistical data as state secrets, is as undeveloped in statistics as an examination of the yearbook suggests. Again, the inclusion in a U. N. table of some figures—governmentally submitted—is no necessary indication of their scope, recency, completeness of coverage, or reliability.

[8] The Committee on Government Statistics ond Information Services, which these bodies created, recommended the creation of a Central Statistical Board, which for a time the Committee financed and staffed. The Board, in turn, evolved into the Division of Statistical Standards, now the Office of Statistical Standards, of the Bureau of the Budget, in the Executive Office of the President.

However, other types of evidence support a belief in the statistical preeminence of this country. The number of qualified statisticians in the United States exceeds the number in other countries; as does also the number of these who are recognized as having professional distinction. The relatively large number of American statisticians with the highest international reputation may be seen in the roster of the International Statistical Institute. Elections to this influential association of leading statisticians formerly came most numerously to statisticians in several European nations; but in recent years the United States has forged into the lead.

The membership of the American Statistical Association, the leading organization of professional statisticians in the United States, greatly outnumbers that of any other statistical society in the world. It probably exceeds subsantially the total of all others combined.

Related to this fact is the large number of courses in statistics offered to students in American universities and colleges. Numbers of courses are no evidence of relative technical development or superiority, but they do suggest the degree to which educated Americans have come to be "statistically minded" in their thinking. Moreover, the most advanced of our university courses are at least equivalent to those of the most advanced institutions elsewhere.

In the rapidly developing science and practice of statistical sampling, there can be little doubt that American universities and governmental institutions—notably the United States Bureau of the Census—lead the world. When the United Nations Statistical Commission was authorized by the Economic and Social Council in 1946 to create a Subcommission on Statistical Sampling, only the United Kingdom, France, India, and the United States were found to have national experts of such acknowledged high standing as to warrant invitations to subcommission appointment. The Economist of London, in urging editorially that "more use should be made of sample surveys," referred to sampling as "a technique in which Britain lags far behind the United States."[6]

Another indication of American statistical leadership is the fact that students of statistics from underdeveloped areas of the world who would formerly have sought to enter European universities for advanced instruction are now flocking in increasing numbers to the United States. Requests come in from all parts of the world for the advice and assistance of American statistical experts in developing and improving the statistical activities of other nations. The statistical personnel of no other country appear to be in such great demand, either for bilateral or multilateral assignments.

All of these facts suggest that the economic statistics of the United States must be pretty good if not better than those of any other nation. But are they good enough? Are statistics always available to us for the purposes for which we need them? When available, are they adequate to serve these purposes?

At least half of the world's industrial production is concentrated in the United States. Business is more free in this country than in any other, both of governmental controls and of cartel arrangements. Does this not mean that we need more and better statistics than any other nation? When millions of decisions are made by American businessmen in matters over which their counterparts in other lands may have no independent choice, can we be content with a statistical system that is only a little better than those of sister nations who have lesser resources and responsibilities? May we not actually lag behind some smaller countries whose statistical efforts and products, relative to the demands upon them, may be superior to our own? Truthful answers to these questions would leave us no grounds for complaisance.

If the criterion of statistical development is relative rather than absolute, international comparisons become more difficult. Particular criteria, applicable to special segments of each nation's statistical organization or products, tend to replace overall ratings and appraisals. The difficulties may be illustrated:

Perhaps the nation whose statistical organization is most easily compared with that of the United States is the Dominion of Canada. In area and in political, economic, and social structure the two nations are similar; but whereas the statistical activities of the central government of Canada are centralized in its Dominion Bureau of Statistics, those of the United States are decentralized.

The Canadian Government regards statistics as important. First priority in the planning program that is remaking the capital city of Ottawa was given to the construction of a model structure for the Bureau of Statistics, complete

[6] April 10, 1954, Scrutinising Statistics, p. 100.

with modern and efficient facilities. Its mechanisms do not include a UNIVAC, the famous electronic computer in the United States Bureau of the Census; but the population of Canada—and hence the volume of data to be processed—is less than one-tenth that of the United States. The UNIVAC and similar devices have been in use for a relatively short period, so their full potentialities have not yet been assessed. There are worth-while applications for which the ultra-high-speed equipment seems well suited, but which have not yet been attempted. The Canadian Bureau will benefit by this experience in deciding the proper degree of mechanization of its operations. Relationships between the two agencies have been close. Imitation and borrowing between them have been two-way. Thus, the satisfactory experience of the Bureau of Statistics with "mark-sensing," a labor-saving device in use for special applications for some years in both countries, encouraged our Bureau of the Census to speed its adoption and further mechanization.

The statistical products of the two countries reflect their related but partially divergent economic structure and interests. Even when the same series are compiled in both countries they may appear with greater frequency or in greater detail in one than in the other. For example, Canadian production of cotton yarn has been published for each year since 1936; while for the United States during the same period this information has been available for the 3 census years 1937, 1939, and 1947 only.

Such illustrations indicate clearly that it would be unsafe to claim that the economic statistics of the United States are either more or less developed than those of Canada, relative to the respective needs of the two countries.

The same must be said of comparisons between United States statistics and those of some smaller nations, among which the Netherlands may be taken as an illustration. The Netherlands maintains "a continuous record of the number and characteristics of dwellings" through a system of local registers in which particulars concerning new dwelling units are added and the records of demolished houses are deleted.[7] As a result the housing statistics of the Netherlands are superior to those of the United States, being more complete, more current, and more detailed.

The classifications used in the Netherlands for reporting the Government's current and capital expenditures have been worked out with great care, in close cooperation not only with fiscal authorities but also with the statisticians responsible for estimates of national income and capital formation. The Central Bureau of Statistics secures quarterly data on the capital expenditures of all local authorities. The United States has not secured such information in the past 12 years, though it would have been provided had the quinquennial census of governments been taken in 1952, as scheduled by law.

Once again, conclusions from such facts as to the relative development of governmental statistics in the Netherlands and in the United States cannot be safely drawn. It can only be said that the Netherlands Government seems to feel more need for housing statistics and for financial statistics than does the Government of the United States.

In general it appears that many other nations, particularly in western Europe, have better and more abundant statistics of living and cultural facilities—houses, libraries, art galleries, theaters—than does the United States. Moreover, this country is almost completely lacking in such annual compendia of municipal statistics as the Jahrbuch der Arbeiterkammer in Wien (Yearbook of the City of Vienna) or the Statistical Abstract for London—types of statistical documentation familiar to Europeans. Nor can the United States Government boast of a statistical guide of equal convenience to users of its data as the Guide to Current Official Statistics which may be purchased from Her Majesty's Stationery Office throughout the United Kingdom.

Nevertheless it seems probable that the economic statistics of the United States excel those of countries which excel us in these other particulars.

PRIVATELY PRODUCED STATISTICS

The place of privately produced statistics in the Nation's statistical system has been given some attention above in discussing the role of the Federal Government. It is there stated, and we repeat, that the Federal Government should "encourage, take cognizance of and utilize the related information collected by * * * private organizations."

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[7] Cf. Report of the eighth session, United Nations Statistical Commission (E/2569; E/CN.3/192, par. 55).

The overall objective of a governmental policy of encouraging the private production of statistics is to promote the efficiency of the national economy. The more limited objectives are the avoidance of duplicated effort in the collection of statistics and the intermeshing of statistical data obtained from different sources, both public and private, into a coherent whole.

The initiative in this integrating process must usually be taken by the Federal Government, which must also assume considerable responsibility for the reliability of the integrated series. Hence it cannot avoid the necessity of assuring itself of the reliability of privately produced statistics, within known margins of tolerance, before using or publishing them.

Actually, the Federal Government has done much to make privately produced statistics more generally available through republication in such media as the Department of Commerce's monthly Survey of Current Business and the Federal Reserve Board's monthly bulletin. Some 2,600 statistical series are published monthly in the Survey of Current Business and a not inconsiderable number of these are based on data privately produced. The published series have been chosen as significant measures of the current operations of the national economy and reflect experience as to what information is most useful to each industry and trade group and to business in general.

Another type of integration between governmental and privately produced statistics is perhaps even more important: Trade associations and journals concerned with particular segments of trade or industry are conscious of needs for specific and frequent measures of activity in their respective fields. The development of monthly or more frequent reports by private organizations is encouraged through provision of annual benchmark series by the Federal Government. The trend toward this type of allocation of statistical responsibilities between Government and private agencies is suggested by the composition of the index of industrial production computed by the Federal Reserve Board. In terms of data sources and their assigned weights government agencies account for 83 percent of the annual index and 76 percent of the monthly index. Privately produced statistics supply the remainder.

As more and more trade associations become active in providing current measures of activity relating to their own industries or products, we may expect a growing ability by the Government to include such series in its monthly publications and in its own composite estimates. The process is now under way, with results that meet general satisfaction. The procedures already followed by Federal agencies provide assurance that it will continue. For this reason we have no specific recommendations as to privately produced statistics, not now appearing in Government publications, which should be made more widely available because of their usefulness in economic analysis for policymaking.

IMPROVEMENT OF FEDERAL STATISTICS

The question of what Federal statistical programs should be improved or expanded is a difficult one. The purpose of the Government's statistical program is to supply knowledge about diffuse or complex economic and social conditions which cannot be grasped or understood except through orderly arrangements of numbers. Even as a society we can never have enough knowledge on any subject, in an absolute sense we will never have adequate statistics for all purposes. In its day-to-day work the Office of Statistical Standards of the Bureau of the Budget keeps in mind three questions:

(1) Is each of the statistical activities the Government is engaged in useful and efficiently carried out?

(2) Are there urgent problems in Government for which more or better data are needed?

(3) Do business, labor and other groups need statistics which the Federal Government should supply?

Answers to these questions necessitate a constant consideration of the diverse and separate needs of many agencies and private interests. Statistics of great importance to one may have slight importance to another, and to achieve proper balance among the different programs all must be studied carefully, sympathetically, and critically. The existing system has developed in response to needs. Continual review by the agencies themselves, the Bureau of the Budget, the Appropriations Committees, and others gives some assurance that the existing programs are useful and efficiently carried out, though this does not imply that no further economies are possible. Waste always exists somewhere and it

will continue to be sought out and eliminated. New ideas and advances in statistical theory and practice continue to open avenues for improvements and savings, and developments in one field open possibilities of savings in others.

Role of consultation in statistical programing

Two characteristics of the existing Federal statistical system are especially noteworthy. First, there is a great deal of interagency consultation and planning—every agency depends to a greater or lesser degree on other agencies for the statistics it needs in studying its own fields and carrying out its own responsibilities. This consultation is carried out both through a formidable list of interagency committees established by the Office of Statistical Standards in the Budget Bureau and through bilateral discussions of technicians in the different agencies who have grown up in the atmosphere of interagency exchange. Second, channels of consultation are maintained through advisory committees drawn from the chief private users of Federal statistics.[8] These committees go over the agency programs and advise on balance among them, on technical problems, etc. Nothing could be further from the truth than the idea that Government statistical programs are developed in a limited framework of a single agency's interest. Needless to say, the limited resources available do not permit the fulfillment of what each interest would consider to be adequate programs of statistics, but many interests are weighed and priorities are carefully considered.

Adequacy of present statistics

The conception of adequacy cannot be detached from intended *use*. Which of the statistical data we now have are adequate, which are inadequate, and what is necessary to bring them up to a satisfactory degree of adequacy for the uses we now foresee? The Office of Statistical Standards has discussed these questions with statisticians and users of statistics in the Government, in business, and in general research. Its opinions have been influenced by theirs but the suggestions in this memorandum represent its own best judgments in the light of all the evidence.

For a full understanding of the economy—including long-time trends, slow but important changes in structural relationships, and basic economic forces—a great many expansions and improvements in present statistical series are needed. For special programs and specialized uses much greater detail may be required. Hence, in considering the adequacy of statistical programs the comments in this paper are limited to one particular class of uses—analysis of the general economic situation. Moreover, it seems most useful, in the context of the Economic Committee's primary interest, to concentrate attention upon the adequacy of current and sensitive indicators of economic conditions. In addition to these series themselves, other statistics necessary as benchmarks will be mentioned.

This particular emphasis requires selectivity. It would not be practicable to present a complete picture of all specialized needs for statistics, even within the limits indicated. Since different approaches to economic analysis may require different statistics, many people may quite legitimately differ with the selection here suggested and with their relative importance as indicated. The limited number of series on major aspects of economic activity herein discussed seem to the Office of Statistical Standards to be among those most needed for overall analysis.

General statistical needs and tools

A few general needs may first be mentioned: There is widespread agreement upon the need for strict adherence to the schedule of censuses prescribed by law. They are the benchmarks without which most of the current indicators could not exist. Statisticians and economists everywhere depend upon them, and the recent lapse in the schedule, because of the failure of appropriations, has produced extreme confusion among both producers and users of other data. Up-to-date census data would improve many series and increase confidence in their accuracy. First on a list of needs, therefore, should be new censuses of manufactures, business and agriculture.

Secondly, there is a general demand that current indicators be made available more quickly. During the past year a good deal of work has been done under the stimulation of the Council of Economic Advisers to speed up the release of data but much more progress is needed before this aspect of statistics production is considered adequate.

[8] See pp. 129–145 for recent membership lists.

Greater accuracy through larger samples or better techniques would probably rank third in a general list of needs. Such improvements usually require additional manpower and funds, and appreciable improvements in statistics pertaining to a large and complex country such as ours require appreciable amounts of money. Greater detail or expanded coverage also imply expanded budgets.

Among general needs may also be included a basic statistical tool that is not well developed—a periodic consumer survey of incomes, expenditures, savings, debts, and other economic characteristics by family characteristics. At the present time the Federal Reserve Board's annual survey of consumer finances and the Census Bureau's annual survey of incomes fill an important but limited part of this need. The infrequent surveys of consumer expenditures by the Bureau of Labor Statistics and the Home Economics Research Branch increase our knowledge of the changes in the patterns of expenditures related with other characteristics.

Other specialized and limited needs are met from time to time with isolated surveys. However, an integrated program, not necessarily incorporated into a single survey, would improve the body of data available in this field. To indicate some of the varied kinds of uses may illustrate the range of interests affected: The Department of Agriculture needs consumer data on purchases of different classes of agricultural products and on pattern of expenditures of farm families for its index of prices paid by farmers; improvement of the net farm income estimates requires a flow of information on farm expenses; the Department of Labor needs periodic data on patterns of expenditures of urban wage earners in order to maintain an up-to-date Consumer Price Index; business analysts need current data on the pattern of changes in expenditures in different economic groups accompanying fluctuations in income or employment. Better understanding of the savings phenomena through study of savings and spending actions of different economic groups can be obtained through such surveys and a number of other uses may be developed. We have much to learn about how better to conduct and analyze such surveys, but the many needs for data they would supply emphasize their desirability as a basic statistical mechanism.

Finally, two other data sources should be mentioned because of their importance as statistical tools. The administrative records of the Internal Revenue Service and of the social-security system provide significant benchmark information for many current statistical series. Without these records the quality of Federal statistics would be lower and their cost would be greater.

Tax returns.—Frequent references are made in the sections which follow to tabulations made from individual, partnership, and corporation tax returns, which take advantage of the great mass of economic data filed in connection with the income taxes. There are unavoidable delays in making these tabulations available, since the returns are filed after the end of the year and administration of the tax system must take precedence over statistical uses. Nevertheless the information derived from these tax records is extremely useful as a detailed historical record and as a benchmark for current measures.

BOASI statistical program.—Social-security programs developed in the mid-1930's have provided a body of administrative records which have had considerable impact on the Federal statistical system. Two types of information have been especially important from this point of view:

(1) Reports from covered employers, giving employment and taxable wages. These are classified by industry and totals are used as benchmarks and as sampling frames (annual survey of manufactures). They are jointly published in great geographic detail by the Bureau of the Census and the Bureau of Old-Age and Survivors Insurance in County Business Patterns. Statistics from this source are incorporated in national income estimates while the original returns are used as mailing lists to insure complete coverage and economical collection in censuses of manufactures and business.

(2) Employment histories of individual workers. Individuals and their taxable earnings are tabulated by age, sex, color, continuity of covered employment, etc. These records show lifetime earnings in covered employment and mobility of workers from employer to employer, geographic and industry moves.

There are usually difficulties and drawbacks in using administrative records for statistical purposes. In the past, limitation of social-security coverage has been one of the principal drawbacks. Another difficulty has been the limitation of the earnings information to taxable wages ($3,600 per year since 1951). Furthermore, the size of the operation has meant delay and difficulty in tabulation

so that the information can be used as benchmarks or for detailed historical analyses but not for current indicators.

It now seems likely that some of these drawbacks will be less important in the future as a result of the recommended expansion of social-security coverage. Further, the possibility of integrating Internal Revenue Service and BOASI record processing may provide the latter with information on total earnings. The full effect of these changes on the Federal statistical program may not be felt for years. But as coverage of the BOASI program becomes more complete, it is apparent that it may develop as a rich source of historical and benchmark material on individuals as well as business establishments. The Census Bureau is now exploring, for example, the feasibility of using some of the BOASI information to improve its annual intercensal estimates of population by States.

The experience of the past 10 years seems to indicate that most fruitful results emerge when planning for use of administrative records is jointly undertaken by the administrative agency and the statistical agencies concerned, planning that may possibly result in supplementary surveys to permit using administratively designed records to serve statistical needs. To make sure that the Federal statistical agencies are aware of the implications of the proposed new coverage provisions and the prospective procedural changes, the Interagency Advisory Committee on BOASI Statistics is meeting under the aegis of the Budget Bureau.

Progress toward filling gaps

In 1948 the Joint Committee on the Economic Report issued a report on statistical gaps prepared by its staff. The committee said at that time, "members of the committee and its staff do not commit themselves * * * to support of the complete program of the studies presented. They do feel that from the standpoint of statistical knowledge and the work of this committee each of the studies deserves the widest discussion and consideration." In 1949 in its Joint Economic Report the committee suggested two additional fields in which data seemed inadequate. The Office of Statistical Standards from time to time has reported on the considerable progress made in studying some of these problem areas. An analysis of methods, concepts, etc., has been made in all of them. A brief summary of the current status of the studies may be useful at this point though some repetition will occur in the systematic listing of general economic indicators in section II.

> "(1) Periodic surveys of consumer purchasing power and demand, sufficient to show—
>
> "(*a*) The distribution of income and savings available for expenditures by geographic areas and among various consumer groups and income brackets, and
>
> "(*b*) Current and prospective patterns of consumption and expenditures."

The Federal Reserve Board annual survey of consumer finances now supplies some of this information on a national basis. The BLS survey of urban consumer expenditures for 1950 (conducted for revising the weighting pattern of the CPI) was a large sample with comprehensive questions on incomes, savings, and expenditures. A budget request for general tabulations to permit general analysis of these data was turned down, but negotiations are now being completed with a foundation and university for analysis of the information. The Bureau of the Census annual survey of incomes has supplied an annual series on incomes, and the major analytical work of the Office of Business Economics, the recently published Income Distribution in the United States, initiates a new series. The Home Economics Research Branch of the Department of Agriculture has made several studies of farm family spending and savings in limited geographic areas during the past 10 years, but has not conducted a nationwide survey among farmers since 1941–42.

A number of budget requests to put this kind of survey on a more regular and improved basis have been turned down. The statistical resources in this field have been slightly improved since 1948, but a better integrated program on a periodic schedule and carefully planned to serve all uses would improve the statistical system.

> "(2) Collection of information on wage earnings of employees in activities not covered by our social-security system."

The proposed expansion of the social security system will require a complete reexamination of this field, as discussed above.

"(3) Improvement of the information on returns to capital and management of unincorporated businesses."

This problem is discussed in staff memorandum No. 3. Plans for speeding up tabulations from income-tax returns offer prospects for better benchmark data.

"(4) Collection of more information on employment and unemployment, adequate to reveal geographic differences in employment trends and unemployment rates, and to provide data on occupational and other characteristics of the unemployed."

The recent revision in the sample used by the Census Bureau for the Current Population Survey will provide some regional data on trends in employment and unemployment while the development of integrated BLS and State employment series by industries supplies monthly estimates for States and major metropolitan areas as well as national employment totals. The Bureau of Employment Security issues a weekly report on unemployment-insurance claims which is useful for following State trends in unemployment. The BES is also studying ways of making current estimates of total unemployment by States from the administrative records of claims. Finally, an interagency group is once more reviewing the concepts incorporated in present statistics on employment and unemployment to determine how adequately they meet current needs.

"(5) Development of more complete and current information on financial trends in business, providing industry totals, data on business operations by size of business, and information on business concentration."

The Securities and Exchange Commission-Federal Trade Commission financial reports continue to cover manufacturing corporations. Repeated budget requests which would permit expansion to trade and mining, and more complete annual reports have been turned down. An improved program of tabulations from corporation tax returns is discussed in staff memorandum No. 3.

"(6) Taking of an up-to-date census of wholesale and retail trade and services by means of which the current statistics on business and distribution may be improved and made more reliable."

The last census of business covered 1948. The statutory schedule called for censuses of manufacturing, mining and business covering 1953. The request for these censuses in the fiscal year 1954 budget was turned down, but amending legislation authorizing the censuses to cover the calendar year 1954 was enacted in June of this year. A corresponding budget request is under consideration by the Congress.

"(7) Development of adequate concepts for measuring productivity and the collection of data to supply information on the course of changes."

Reductions in the BLS appropriations have resulted in curtailment in the work currently being done in productivity measurement. An annual conference jointly sponsored by the BLS and the Bureau of the Budget has studied new ways of measurement, new concepts, and new uses for productivity measures. However, the adequacy and scope of statistics available in this field are probably inferior to those of 1948.

"(8) Development of data on costs of construction and improvement of data on the volume of new housing and nonresidential construction."

An improved program has finally been developed for consideration in the budget for fiscal year 1956.

"(9) Improvement of inventory statistics by covering a larger and more reliable sample which would permit a breakdown of inventories at the various stages in the industrial process."

The Bureau of the Census, using part of the one-time "spot check" appropriation for fiscal year 1954, is developing a program which will provide improved estimates of monthly wholesale trade inventories (and sales) and is testing methods of collecting monthly retail trade inventories. Both of these monthly surveys would be tied in with more substantial annual surveys. These programs, if successful, will provide data adequate for general analysis, but they

are not yet fully incorporated into the regularly financed current program of the Census Bureau. The inventory series for manufacturing need improvement.

"(10) Collection of detailed information on the relationship of requirements for materials, capital equipment, and energy to the volume of production, to permit evaluation of the industrial consequences of production programs."

An elaborate interagency project on interindustry relations was financed by the Air Force and the National Security Resources Board and monitored by the Office of Statistical Standards of the Bureau of the Budget. It compiled an integrated statistical picture of the 1947 industrial interrelationships of flows of materials, capital goods requirements, critical materials consumption patterns, and labor requirements.

"(11) Collection of fuller information on business intentions with regard to capital expenditures and related data."

In addition to continuing the quarterly series on business intentions to spend on plant and equipment for each forthcoming quarter, some special studies have been conducted. One special study by OBE and SEC, conducted in 1950, analyzed the reasons why the level of plant and expenditures anticipated for a given period was not realized during that period. A second special survey, conducted late in 1952, studied the post-Korean investment plans of a group of United States business corporations in substantially more detail than is done in the regular surveys.

"(12) Collection of more current and detailed information on expenditures of State and local governments, for use in preparing estimates for the Nation's economic budget."

Funds were not appropriated for the statutory census of governments to cover 1952, so that benchmark data and State-by-State aggregates are now 14 years old. Beginning with 1952, however, "expenditures" were added to the Census Bureau's annual survey of governmental revenue and debt, so that national estimates based on a sample of governmental units are now available.

"(13) Data on the general level and trend of economic concentration."

The FTC has just recently issued a report on changes in concentration in manufacturing, based upon the 1935 and 1947 Censuses of Manufactures and the 1950 Annual Survey of Manufactures.

"(14) Data on unit costs."

While some unit-cost data are collected in special studies by various regulatory agencies, no specific program has been drawn up for a systematic, regular program of unit-cost data collection in nonregulated industries.

II

In this section the adequacy of existing statistics for use in general economic analysis will be examined. As indicated in a preceding section we are not here concerned with many specialized uses of statistics which are of great significance to particular economic groups in studying their own problems. The following appraisals, therefore, should be read with due regard to the more general framework in which the judgments are expressed.

1. Statistical improvement needed for estimates of the national accounts

Among the chief current indicators of the state of the economy is the set of series known as the national accounts prepared by the Office of Business Economics of the Department of Commerce. They include measurements of the flow of production in every sector and the flow of income to all persons in the country—

Income produced in each industry (national income).
Income received by the Nation's consumers (personal income).
Business investment (gross private domestic investment).
Government purchases.
Our export-import balance.
Business profits.
Savings (personal and total gross saving).

Almost without exception these estimates are compilations and readjustments of data previously secured by administrative agencies for their normal operating needs (e. g., the Bureau of Old-Age and Survivors Insurance) or by the statistical programs of the major statistical agencies (e. g., the Bureau of the Census).

Because the national accounts are developed by using data collected for other purposes we must improve data in other agencies if we wish to improve these figures. The most urgent needs include the following:

Income of trade and mining corporations: reliable current data.

Income of unincorporated business: reliable benchmark and current data on business expenses, inventories, and net income.

Net farm income: reliable current data on net farm expenses and inventory change to permit more adequate estimates of income.

Rents: reliable benchmark and current data on rents received by individuals and on expenses of real estate operation.

Construction activity: reliable data on money value of work actually put in place. (See section on construction.)

Government purchases of goods and services: reliable data for Federal, State, and local governments on government purchases of goods, and on expenses of operation for non-Federal government.

Business investment: reliable current data on government and business purchases of capital equipment and land.

Consumer expenditures: data on sales of individual commodities and commodity groups to integrate with data on retail sales for estimating consumer expenditures by commodity.

Consumer saving: estimated as a residual, these estimates can be improved only by making many of the basic improvements in the income and product series noted above—particularly income of unincorporated business and farms.

These improvements can be obtained whenever their importance is deemed sufficient to warrant the expenditure of additional funds upon them. An expansion of existing collection programs within existing agencies would in general be sufficient. Some testing of procedures and some further development of programs should accompany the expansions, but by and large the procedures are well established and the methods of collection are agreed upon.

2. Statistics on the economic status of farmers

The Agricultural Marketing Service of the Department of Agriculture makes annual (calendar year) estimates for the United States of (1) cash receipts from farm marketings; (2) gross farm income; (3) farm operators' realized net income; (4) net income of persons on farms from farming; and (5) net income from agriculture. Production expenses, market value of home consumption of farm products, and other data necessary in the computation of net income are also estimated on an annual basis. "Gross farm income" series is estimated with satisfactory accuracy. However, the net income series are deficient because of the weakness in the estimates of farm expenses. See Staff Memorandum No. 1.

The adequacy of the series on prices paid by farmers is discussed in the section on price indexes.

3. Savings estimates

There are two main series showing savings estimates. The liquid savings estimates of the Securities and Exchange Commission are compiled primarily on the basis of reports from financial institutions. Although they have been fairly useful there are deficiencies which require correction.

The other regular series is the personal savings estimates of the Office of Business Economics. This series is derived by subtraction of estimated personal consumption expenditures from estimated personal disposable income and being a small residual from two large components is subject to errors in those other estimates. It is a tribute to the overall quality of the national income estimates that the personal savings estimate is as reliable as it is. However, for modern needs it is not adequate and in the section on national accounts we have listed a number of improvements in statistical series which in turn would improve the national income-product estimates and result in better "personal savings" estimates.

Although improvements in these series should be made first, a substantial gap exists in our knowledge of the economic characteristics of savers—what income

groups, what economic classes, etc. The Federal Reserve Board annual survey of deposit ownership and the Department of the Treasury surveys of ownership of Government bonds throw some light on the distribution of savings among types of owners.

An interagency committee has been studying the sources and methods used, the form of presentation, and other elements involved in the adequacy of the savings series for analytical purposes and a report embodying recommendations for changes should be available soon.

4. Price indexes

Wholesale price index.—The recent revision by the Bureau of Labor Statistics brings this index to an adequate level of accuracy for measuring the general trend of prices. More study is needed of the problems involved in pricing, from one time to another, highly fabricated items where quality changes may be embodied in successive models. A separate classification to make the data more usable as price deflators for value flows and for better analysis of price movements and influences affecting prices should be developed.

Consumer Price Index.—The recent revision by the BLS with the introduction of 1952 pattern of expenditure weights brings this index to an adequate level of accuracy for measuring the general trend of prices for the urban wage and salary worker group. Provision should be made for watching current expenditure patterns to assure that the weighting pattern does not get too far out of date. There is a need for a retail price index. The Consumer Price Index is frequently used as a retail price index but is conceptually quite different and appreciable differences in movement might occur. The major part of the price information needed is available through the items already priced for the CPI and the index of prices paid by farmers. Study of the effects of the different concepts of pricing used by BLS and AMS is needed before these prices are combined, and probably further analysis of consistency of price movements between grades and classes of products is needed but such an index should not be an expensive addition. A City Worker's Family Budget, showing changes in the dollar cost of standard "baskets" of consumption in different cities, would also be a useful addition at a modest cost since the items are already priced for the CPI.

Prices paid by farmers.—In the 1950 revision of this index the AMS did not have available the results of any current expenditure survey from which they could determine the pattern of expenditures of farmers. In view of the importance of this index good basic data on these expenditures should be obtained. The concept on which this index is based differs from that used to measure trend of prices for wage and salary workers and further study should be given to the effect of this difference in comparative movements of the two series. Moreover, some of the collection techniques are inadequate.

Prices received by farmers.—This index compiled by the AMS is probably adequate for general analysis, though greater detail and some improvement in collection techniques would be useful for specialized purposes.

Prices paid by Government.—Construction of indexes of prices for Government purchases should be studied. Such indexes would be useful to the Government in analyzing expenditures and making budget estimates, as well as in providing criteria for judging the effectiveness of procurement policies. However, there are difficult technical problems involved in such indexes which have not yet been solved.

See Staff Memorandum No. 2.

5. Indicators of business conditions

Financial reports on business.—Quarterly statistics on corporations engaged in manufacturing compiled by the SEC and Federal Trade Commission and on the regulated industries (such as electric power, banks, etc.) compiled by the regulatory agencies are generally adequate. Although they are issued with reasonable promptness their significance during periods of change has led us to attempt to get them issued on a preliminary basis somewhat faster. Corporations represent the dominant share of these *manufacturing* and *regulated* industries and for most purposes these segments may be considered adequately covered. For *trade* and *service* industries there are two problems: We do not have adequate current reports on corporations, where a feasible program can be developed, given moderate amount of funds; and in addition corporations encompass a much smaller share of the total activity. For the mining industry a current reporting program on corporations would probably suffice. For unincorporated business in all industries we do not have adequate statistics in part because a current

reporting program for this latter group would have grave operating problems. We have been working with the Internal Revenue Service to expand and speed up statistical tabulations from tax returns to make available better recent benchmarks to extrapolate for current estimates.

New plant and equipment expenditures.—Statistics on the current and anticipated business expenditures for plant and equipment are complied by the SEC, OBE, and ICC. They represent one of the major postwar additions to our statistical system. The reliability of reported anticipations or plans to expand plant has not been tested by a sudden reduction in plant and equipment investment but conceptually this series is probably adequate for the tentative use analysts now make of it. There is a question, however, whether the sample used for this series is still adequate, and because of the value of such data for modern analysis and the uncertainty as to the dependability of company forecasts against actual operations under changing conditions, we believe a greatly improved sample should be adopted. The series related to nonrail transportation and commercial investment may be especially vulnerable on this point.

Inventories and sales.—Inventories and sales statistics covering manufacturing, wholesale trade, retail trade and personal service trades are of varying quality. Historical data which provide adequate benchmark statistics for most purposes are available for some past years from tabulations of Federal income-tax returns and census data.

However, the tax returns tabulations have not been available until three or more years after the close of the year to which they relate, and the last full census data available (1947 and 1948) are becoming out of date. Because the tax returns tabulations are produced as a byproduct of the process of tax collection and cannot interfere with the administrative uses of the tax returns there have been extended delays in making tables available. However, recent study of the problem suggests that the delay will be reduced somewhat as the result of improved procedures being adopted by the Internal Revenue Service, and that a faster tabulation procedure which still does not interfere with the administrative uses of the returns can be developed. As indicated on an earlier page, a request for funds supplemental to the 1955 budget to permit the business and industrial censuses to be taken in 1955 for the calendar year 1954 is now under consideration by the Congress.

Current statistics on inventories and sales are inadequate. This is especially true of inventory statistics generally and for the personal service trades sales estimates as well. Monthly sales data covering manufacturing, compiled by the OBE, and wholesale trade and retail trade data, compiled by the Census Bureau and OBE, are basically sound but need greater accuracy in their industry detail. Comprehensive monthly sales data covering the personal service trades do not exist. Should the Census Bureau be able to carry out planned improvements in its current programs covering wholesale trade and retail trade, the major deficiencies in both the monthly inventories and monthly sales statistics in the distributive trades may be corrected during fiscal year 1955. If so, our greatest need concerning current inventories and sales statistics would be one of improving the data for manufacturing, especially industry detail. (See staff memorandum No. 3.)

6. Construction activity and housing starts

The monthly series on number of new nonfarm dwelling units started is compiled by the BLS. It is probably adequate for trend of construction but the absence of any benchmark makes it difficult to judge the absolute level, and for many purposes the actual number of houses may be as important as the trend. The procedure followed appears to be the most practical but additional work needs to be done to evaluate the validity of building permits reports, which are the main sources of data on which the series are based. Better collection in nonpermit areas may be needed to improve the nonfarm total. The monthly series on new construction activity in which housing starts, private nonresidential construction starts, and public construction are translated into the amount of work done each month, is a significant statistic for analysis of business activity and is inadequate because of the methods used. The activity series is issued jointly by the BLS and Business and Defense Services Administration and a great deal of ingenuity has gone into tapping various sources of data on starts and estimating the value of work done each month; but what is needed is a comprehensive program, better integrated and with greater assurance of accuracy. One major gap exists since no reliable estimates on maintenance, repair and

modernization are available and this type of construction is probably of the same order of magnitude as any one of the three major components of new construction.

Statistics on various other pieces of construction and housing are also lacking, such as volume and characteristics of housing inventory and changes therein; backlog of construction planned, to improve the anticipation picture; better data on construction costs; more up-to-date estimates of material and labor requirements; and more frequent information than the decennial census provides on vacancy rates. (See staff memorandum No. 4.)

7. *Foreign trade and shipping; Balance of international payments*

Foreign trade statistics.—The principal sources of foreign trade statistics are the export declarations and import entry forms filed with the Bureau of Customs. These provide a substantially complete coverage of our merchandise transactions with foreign countries. The Bureau of the Census compiles the statistics from these reports. The basic need in this area is not the collection of more data, but improvements in tabulation and publication.

Specific improvements needed in current releases of the Census Bureau include greater commodity and country detail (involving more complete tabulation of low-value exports and imports); the use of larger print; and the resumption of publication of the Monthly Summary of Foreign Commerce, which has not been published since April 1951.

There is also need to resume publication of the annual Foreign Commerce and Navigation of the United States, last published for the year 1946. In addition to reestablishing the permanent record of our foreign trade, this would provide the means of obtaining comparability in our commodity statistics, which have undergone many changes in classification, and of producing useful summary tables on trade movements by commodity groups, country and economic classes.

Shipping statistics.—The situation in the shipping statistics field is essentially the same as in foreign trade statistics. The basic data currently being collected are generally adequate, but there is need for more complete and timely publication of the statistical results. (See staff memorandum No. 5.)

Balance of payments.—Balance of payments statistics are compiled by the Office of Business Economics. They have been reasonably adequate for general analysis, but there is a need for more geographical detail than has been available. Care must be taken to avoid deterioration of the figures as a result of greater difficulty in obtaining source materials. Important among the tasks foreseen for the future improvement of the statements are the investigation and possibly refinement of the merchandise trade data with respect to timing and valuation, obtaining information with respect to various types of transactions on which virtually no data are available, and the provision of a new benchmark for estimating foreign direct investments in the United States. (See staff memorandum No. 6.)

8. *Statistics on production*

Index of production.—The recent revision by the FRB of this index brings it to an adequate level of accuracy as a measure of overall change in physical output of manufacturing and mining. Expansion of monthly and annual data on production and better data on changes in productivity will permit further improvements. (See staff memorandum No. 7.)

Statistics on production of minerals.—Current statistics in this area come from specialized private sources and Federal agencies, primarily the Bureau of Mines. They are probably adequate for minimum peacetime analysis though any increase in mobilization would require expansion. We do not have adequate data on consumption of metals by end-uses and intensive work is now being done by Federal agencies and industry representatives through our Advisory Council on Federal Reports to determine what information can be supplied by business and the best way to collect it. Benchmark data—obtainable only by a census of mineral industries—are badly needed. One of the most troublesome facets of mineral statistics has been the lack of reliable data on mineral reserves; another has been the absence of data on costs and rates of exploration and development. Collection of such data is difficult and additional budgets and clear recognition of need are required for adequate solution. (See staff memorandum No. 8.)

Estimates of agricultural and forest production.—The Agricultural Marketing Service carries out a comprehensive program for current State and national estimates and in general this program is adequate though improvements in statistical techniques are needed. To be maintained at an adequate degree of accuracy periodic censuses are necessary and a census of agriculture—on either

a complete or a large sample basis for the statutory year 1954—is needed. In addition to supplying a benchmark for current estimates of production such censuses supply benchmarks for estimates on farm operations, changing structure of agriculture and other aspects of farming. New needs arise in the coverage of the current estimates—such as recently in broiler and turkey production—but these additions are relatively easily provided for in the existing program. A major research program has been underway for the last 2 years to develop a program of more objective measurements and forecasts and within a few years important improvements should result, but in the meantime the estimates and forecasts suffer from too large an element of subjective judgments.

The program of the Forest Service for determining our forest resources and the drain on them is probably adequate in scope for analysts of general economic conditions but more frequent surveys may be needed for forest management. The consumption of forest products by end products (arising out of manufacturing processes) is encompassed in the section on industrial production. (See staff memorandum No. 9.)

Statistics on industrial production.—Revision of benchmark data is badly needed since the latest benchmark is the 1947 census of manufactures. Legislation was enacted in June to authorize a census covering the year 1954 and funds for this purpose have been included in a supplemental appropriation request to the Congress. Adaptation of the census of manufactures program to meet mobilization planning needs and to reflect demands for more detailed data for analysis purposes will be undertaken based upon a joint industry-Government study now underway. A basic problem to be explored in this study is relating information of a type normally associated only with industry categories more directly to products wherever produced.

Continuation of the present census program for current commodity series, and the annual survey of manufactures will adequately meet the informational needs for current data, with the possible exception of the coverage of building materials. Additional data in this area would add considerably to the interpretation of the construction picture.

9. Money, credit, and Federal financial data

Statistics on money and credit.—Monetary and banking statistics are adequate for general analysis, though special analyses may need further breakdowns and there are gaps and weaknesses in statistics of nonbanking credit. The consumer credit data compiled by the FRB compare favorably with analogous bodies of data. In agricultural finance additional current information is needed on farm mortgage loan experience (tentative efforts are being made in this direction) and on non-real-estate credit. In the field of nonfarm mortgage finance more information is needed about the outstanding debt, gross changes in it, and current lending activity. Important gaps in the field of capital markets relate to activity in the over-the-counter securities market, individual holdings of corporate securities, and the investment activities of personal trust funds and pension funds.

Statistics on Federal expenditures and receipts—The interest in the impact of Federal activities on the economy is so great that analysts may feel a number of inadequacies despite the volume of accounting records. Federal accounting and reporting procedures have developed in ways not necessarily calculated to provide the classifications of revenue and expenditure most relevant for economic analysis or to measure the impact of the budget at all relevant stages from appropriation through final expenditure. Because Federal financial statistics arise mostly out of fiscal accounting which reflects the magnitude, complexity, legal requirements, and geographical diffusion of Federal activities, proposed changes in procedures in the interest of economic analysis must be weighed with great care. The current review of Federal accounting and financial procedures being carried on jointly by the Bureau of the Budget, the Treasury Department, and the General Accounting Office makes possible the consideration of procedural changes. At the same time it is likely that the adaptation of Federal data to national accounting or other economic analytical purposes will require devoting more resources to special reporting and statistical procedures supplementary to the financial records. (See staff memorandum No. 10.)

10. State and local government financial data

The 48 States and 100,000 local governments spend a total of $30 billion a year. The Governments Division of the Census Bureau is the primary source of financial data for all governments presented according to uniform categories,

though there are other compilations of financial reports from these units or of some specialized classes of expenditures. Since the addition of expenditures to the annual survey, the chief deficiency of these statistics arises because of the 14-year interval since a complete census was taken for 1942. (See staff memorandum No. 11.)

11. Employment and related series

There are now four sources of current information on employment conditions, only one of which existed, in a more limited form, in 1929. The four series are—

(1) Monthly report on the labor force, which provides a comprehensive measure of the entire labor force, both employed and unemployed, together with salient characteristics such as age, sex, color, occupational attachment, duration of unemployment (Census Bureau).

(2) Employees in nonagricultural establishments, which provides monthly information on the number of persons on establishment payrolls for a large number of specific nonagricultural industries, hours worked, and payrolls for most of these industries, labor turnover rates in manufacturing (Bureau of Labor Statistics).

(3) Farm employment, which presents monthly estimates both of family labor and hired labor on farms, together with farm wage rates (Agricultural Marketing Service).

(4) Unemployment insurance claims, which provides each week a State-by-State report of claims and the volume and rate of insured unemployment for that part of the unemployed covered by State unemployment insurance programs (Bureau of Employment Security).

Employment and unemployment estimates have key significance not only as current economic indicators, but also as measures of the well-being of the population. They are vitally important to the Employment Act of 1946 and perhaps nothing less than omniscience would suffice. However, substantial and sound programs already exist in this field. Because of the great emphasis given to these measures it is necessary to review carefully and frequently the scope of these programs, the concepts embodied in the measures, and the degree of accuracy needed by analysts for different purposes and under different economic conditions. We have recently appointed a subcommittee of our standing interagency committee which has labor force and employment statistics continuously under review. This subcommittee is to make a thorough reexamination of the concepts and approaches used in Federal statistics on employment and unemployment to see how well they meet the needs of the public and Government for current information. After this subcommittee has reported, the needs of various users can be reflected more realistically in a program for extension and improvement of these series. Until then, indications of the shortcomings of the present series given in the appendix can only be preliminary. (See staff memorandum No. 12.)

Wage statistics.—The average hourly and weekly earnings series published by the BLS are reasonably satisfactory for most industries. However, these figures include the effects not only of changes in basic wage rates, but also of premium pay for overtime and late-shift work; of changes in employment of workers as between relatively high-paid and low-paid work and high- and low-wage companies; and of changes in the output of incentive workers. Moreover, they are limited to production workers in manufacturing or nonsupervisory employees in nonmanufacturing industries. Existing data are inadequate to record accurately the movement of basic wage and salary rates for the economy as a whole, or for particular industries.

Little information is available about the cost of supplementary remuneration and benefits (so-called fringe benefits). However, an experimental survey to ascertain the availability of such information from employers' records is now under way. (See staff memorandum No. 13.)

12. Measurements of labor productivity

This is one of the most difficult areas in which to judge adequacy of available statistics for general economic analysis. Within this framework, there are two kinds of uses: (1) In estimates of what the total output of the economy might be under stated conditions in future periods, account must be taken of the growth of population and changes in productivity, and such measures of trends are needed; (2) since many measures of physical output are partly based on man-hours, either an implicit or explicit assumption as to changes in productivity is involved and broad industry measures are needed.

Inadequate statistical concepts exist for the measurement of overall productivity even though considerable thought and experimentation have gone into the work done by BLS, OBE, and others. However, for many of the uses made of productivity indexes, the crude measurements serve as rough guides and users express more concern about the other elements—prices, employment and manhours, and output. It is of considerable importance, however, that increasing attention be paid to the complex problem of bringing these various elements together within a framework in which all inputs and outputs of the economy are visualized simultaneously. For the second use, better monthly and annual measures of physical output or deflated value of output help to overcome the deficiencies.

In addition to the many specialized uses in which better measures of productivity are needed, we need for illustrative purposes more individual studies of both industries and products to help us understand the effect on productivity of technological change and to guide analysts in estimating factors in which changing productivity is important.

In addition there is needed more critical study and research on ways to measure output against inputs of labor units. The productivity conferences of the last few years sponsored jointly by the Bureau of Labor Statistics and the Bureau of the Budget have made contributions but they also serve to illustrate the amount of work needed before adequate methods of measuring productivity are found. (See staff memorandum No. 14.)

13. Social statistics

The common distinction between economic and social statistics represents a separation useful for some purposes but no clear-cut classification is possible. There is probably no economic fact of greater significance than the number and location of the population. The health and education of the people are matters of economic importance. Yet statistics in these fields are not usually included among economic indicators and we have not discussed their adequacy, which is more accurately judged by other uses than general economic analysis. Staff memorandum No. 15 indicates briefly the characteristics of available statistics in these fields.

14. Mobilization statistics

The appraisal of the adequacy of the various kinds of economic statistics has been made from the point of view of general economic analysis. There is another general use of economic statistics which is important to the Federal Government, but which was not explicitly taken into account in these appraisals: the needs of mobilization planning and program development.

If production data, employment data, and the other subjects of economic information were examined from this point of view, some areas of information that were judged to be adequately covered for general economic analysis might well prove to be less than the minimum necessary for mobilization purposes. Applications of statistics to mobilization problems frequently are more demanding of detail than are uses for general economic analysis. For example, industrial defense problems require information on the detailed location of individual plants, and even important structures in some cases. It follows that production, material consumption, employment, occupational requirements, etc., information must be obtained in this kind of detail for the purposes of the industrial defense problem. Hence, it is not to be presumed that the judgments on adequacy for purposes of general economic analysis can be carried over for studies of mobilization problems.

A comprehensive and detailed appraisal of the adequacy of economic data for mobilization uses depends on the kinds of economic analyses attempted by the mobilization agencies, primarily the Office of Defense Mobilization. At this time, it is not possible to make such an appraisal because of the lack of detail in the plans of these agencies.

Past experience has shown that the economic data essential to general economic analysis substantially overlap those essential to mobilization planning and program development. Hence, it is likely that gaps in our statistical information for the first purpose will also constitute gaps for the second.

General economic analysis has need for information on military procurement in the half-mobilized world of today. Mobilization planning, however, must have defense requirements data in much greater detail to match against supplies of critical materials, industrial facilities, and available manpower. It is one of the major statistical functions of the Department of Defense to produce these de-

tailed estimates of requirements for goods and services necessary to support any kind of military effort the Nation might undertake. Among the most important items made available are the value of procurement contracts placed, deliveries of goods and services, expenditures for procurement, and unexpended balances available. In addition, the size and composition of the Armed Forces and civilian employment of the Department of Defense (including navy yards and other industrial-type facilities) are of central importance to an understanding of mobilization problems.

Another problem related to mobilization for which more detailed statistics are required than are needed for current economic analysis is stabilization of the economy during periods of heavy economic burden of military procurement, and the consequent reduction of labor force by induction into the Armed Forces and the stringent financial operations of a major mobilization. Some of the needed data are available. For example, base-period profits data for use by economic stabilization agencies would be provided by the tabulation of income tax returns by the Internal Revenue Service. In such uses, the precision of the industrial classification of the companies whose returns are included in the sample tabulated becomes very important; the limitations of the IRS data with respect to the detail and precision of industrial classification may require supplementary study. Other data needed for stabilization purposes are not now available. (See staff memorandum No. 3.)

15. Comparability of statistics

In the preceding paragraphs we have discussed the adequacy of the statistics in each of several different sectors, taking as criteria the data requirements for purposes of general economic analysis. We now must admit that such an examination by segments is only a part of the task of appraisal. It is usually necessary to use data on different subjects together: prices and production, or the use of mineral products by manufacturing industries. Each particular problem dictates its own need for comparability among the different types of information that are brought together in attacking it. It is entirely possible that each of the necessary kinds of data would be considered adequate by some general-purpose criterion, and yet the combination for the special problem be found wanting. It is for this reason that the development of standard classifications for industries, commodities, occupations, and other elements of statistical work has received a great deal of attention by the statistical agencies. In addition, interagency work looking toward uniform and consistent application of these classifications has greatly improved the comparability of parallel series.

It is necessary to keep in mind that the attainment of comparability involves more than the standardization of definitions and classes. There are difficult and unresolved conceptual issues. For example, a clerk by day who becomes a taxi driver at night cannot be assigned with accuracy to either occupational category. A company embracing two plants producing different items cannot be clearly assigned to one industry. If its financial records pertain indistinguishably to all of its operations they can be assigned to separate industry classifications only by arbitrary allocations. The labor and material inputs of an integrated plant will differ from the inputs of an assembly plant for the same product.

Much work remains to be done before adequate comparability and the improvements needed in specific areas can be achieved. Some of this work requires additional funds, some of it requires improvement in statistical methods and practices, and some of it requires clarification of what is needed. On this point, especially, the hearings arranged by the Subcommittee on Economic Statistics, and the discussions resulting from them, can be of great value.

APPENDIX A

CHANGES IN 1955 BUDGETS AFFECTING STATISTICAL PROGRAMS

In general, the 1955 budget called for the basic statistical program of the Government to remain at about the same level as in the preceding year. For the general-purpose statistical agencies, some minor adjustments but no major increase or cuts in regular programs were requested for:

Bureau of Labor Statistics (a small net increase, primarily for mailing costs).

Bureau of the Census (a decrease, made possible by the use of the UNIVAC and by increasing the number of arrangements whereby statistics of primary use to certain groups are paid for by those groups).

National Office of Vital Statistics.

Bureau of Mines (statistical activities).

The most important changes in statistical programs proposed for 1955 and summarized in the following sections, affect these agencies:

Bureau of the Census (for the periodic censuses or special surveys of manufactures and other business and agriculture).

Office of Business Economics (study of business fluctuations).

Federal Trade Commission (SEC–FTC financial reports program).

Agricultural Marketing Service (crop and livestock estimates); (farm expenditures for production purposes); (general analysis and agricultural outlook work); (marketing research).

Agricultural Research Service (economics of production program).

BUREAU OF THE CENSUS

Economic censuses

Quinquennial censuses of manufactures, trade, and mining (as well as transportation) under statute should be taken this year, covering activities in 1953. The Congress did not appropriate the funds included in the 1954 budget for these censuses and for preparatory work for the 1955 Census of Agriculture, but appropriated instead $1.5 million for "spot checks" of business, manufactures and agriculture.

The 1955 budget included $650,000 for special surveys ("spot checks") of manufactures and other business, as well as funds for agriculture (see below). This amount would allow for continuation of the Annual Survey of Manufactures and of the annual surveys of wholesale, retail and service trades. This request was disallowed by the Congress.

The Intensive Review Committee appointed by the Secretary of Commerce examined the needs for these quinquennial censuses and recommended that provision be made as soon as possible for a complete Census of Manufactures; that provision be made for a Census of Business and a Census of Mineral Industries to be taken in 1955, obtaining 1954 data; and that any plans for a Census of Transportation be dropped pending further exploration. Legislation providing for censuses of manufactures, mineral industries, and other businesses, relating to the year 1954, was approved on June 18, 1954 (83d Cong., Public Law 411). A supplementary appropriation of $8,430,000 has been requested.

Census of Agriculture

A Census of Agriculture to be taken in October 1954 is required by statute, but funds included in the 1954 Budget to prepare for this census were not appropriated. From the $1.5 million appropriated for "spot checks" in fiscal 1954, the Census Bureau made sample surveys of agriculture in two States (Virginia and Utah) and explored the possibility of a sample census of agriculture. The Intensive Review Committee appointed by the Secretary of Commerce recommended that a complete Census of Agriculture be taken in the fall of 1954.

The estimated cost of a complete census is $22 million, and estimates for an adequate sample census range from $3.2 to $5 million. The 1955 Budget included $3.5 million for the first year's cost of a $4 million sample census of agriculture. This amount was increased by the Congress to $16 million for fiscal year 1955, to provide for the full census of agriculture.

OFFICE OF BUSINESS ECONOMICS

Study of business fluctuations

The 1955 budget request for the Office of Business Economics contained approximately $100,000 for an inquiry into business fluctuations, including additional research on business investment and on individual savings. This increase was disallowed by the Congress.

FEDERAL TRADE COMMISSION

SEC–FTC financial reports program

Collection of current information on the financial status of business is carried out jointly, without duplication, by the Securities and Exchange Commission,

which collects quarterly financial reports from the listed corporations, and the Federal Trade Commission, which collects the same types of reports from a sample of unlisted (typically smaller) corporations. The program now covers manufacturing corporations only.

The 1955 budget included an increase of $146,000 for this program to provide for extension to include wholesale and retail trade and mining corporations, preparation of preliminary estimates, and institution of a new sample which will improve the quality of the data. The recommended increase was made to meet the needs expressed by the Council of Economic Advisers, the National Income Division in the Office of Business Economics, the Federal Reserve Board and Treasury Department. The increase was disallowed by the Congress.

AGRICULTURAL MARKETING SERVICE

Crop and livestock estimates

The 1955 budget included a request for $187,000 for expanding crop and livestock estimates. The proposal included extended coverage of broiler reports; increased reports on turkey production; extended coverage of report of cattle on feed; July forecast and March final outcome report on size of annual calf crop, by States; improved information on potato production; and information on substitution of vegetable fats for dairy products. The full amount of this request was approved by the Congress.

Economic and statistical analysis

Seventy-five thousand dollars has been requested for improving estimates of farm production expenses and income. This proposal would allow development of farm expenditures for production purposes on a State-by-State basis which would strengthen national estimates of farm expenses and farm income.

Ninety-two thousands dollars has been requested for strengthening commodity analysis and agricultural outlook work. This proposal was based on the urgent need for providing a much stronger research basis for commodity analysis and related service work. The full amount of this request was approved by the Congress.

Marketing research

An increase of $1,100,000 has been requested for additional research on marketing and transportation costs; improving and evaluating product quality; market organization, facilities and practices; and market development. Although this research cannot be classified as predominantly statistical, some statistical information would result as a byproduct. The full amount of this request was approved by the Congress.

AGRICULTURAL RESEARCH SERVICE

Economics of production program

An increase of $198,000 was requested for 1955 for economic research to help farmers reduce costs, shift production into more profitable lines, and overcome obstacles to achieving economic balance in production. The full amount of this request was approved by the Congress.

Appendix B

Tabular Summary of Statistical Costs and Services

The following tables show the agencies most importantly engaged in the production of economic statistics and the principal statistics each produces. These lists are not exhaustive but are devised to highlight the major series and to show the variety of statistics produced throughout the Federal Government.

An indication of the amounts spent for statistical work is shown below for agencies whose primary function is statistical or for agencies with a segment of their budget identifiable as primarily for statistical work. The figures for the Bureau of the Census and the Bureau of Labor Statistics are appropriations, adjusted to include transfers; all others are allocations from a larger appropriation item.

	Fiscal year 1954
Department of Agriculture:	
Agricultural Marketing Service:	
Marketing research and agricultural estimates:	
Economic and statistical analysis	$860,000
Crop and livestock estimates	3,842,000
Agricultural Research Service: Farm and land management research: Economics of production	1,283,000
Department of Commerce:	
Bureau of the Census:	
Current program	6,870,000
"Spot check" program	1,500,000
Major censuses	(1)
Office of Business Economics	912,000
Department of Health, Education and Welfare, Public Health Service, National Office of Vital Statistics	1,286,000
Department of Labor, Bureau of Labor Statistics	5,345,000
Department of the Treasury, Internal Revenue Service, statistical reporting	1,633,000
Federal Trade Commission, economic and financial reports	234,000
Securities and Exchange Commission, operational and business statistics	155,000

[1] Between 1944 and 1954, the Bureau of the Census spent an average of about $12½ million annually for the major censuses, including the 17th Decennial Census (Population, Housing, and Agriculture), the 1945 Census of Agriculture and preparatory work for a 1954 Census of Agriculture, and the 1947 and 1948 censuses of industry and trade. Actual expenditures were, of course, concentrated mainly in the census years.

In addition, many agencies develop economic statistics as an integral part of their administrative functions, but this statistical work is so interwoven with their regular operations that an assessment of the amounts allocable primarily for statistical work cannot be clearly determined. Since the statistical value of such data is a secondary result, there is wide variation from agency to agency in interpreting the amount of work properly classifiable as statistical, and various attempts to compute an accurate cost figure for the Federal statistical system have never been completely satisfactory. For these reasons we have not attempted to show expenditures for statistical work for these agencies. An idea of the general magnitude of such expenditures is available from the figures prepared by the Hoover Commission Task Force on Statistical Agencies entitled "The Statistical Agencies of the Federal Government." This report showed approximately $16 million expenditures on statistics and related research, analysis and service for Federal civilian agencies other than those for which figures are listed in the above table.

STATISTICAL ACTIVITIES OF FEDERAL AGENCIES

Agency	Principal economic statistics produced
Board of Governors of the Federal Reserve System.	Monthly: Industrial production indexes. Monthly: Department-store activities. Annual: Survey of consumer finances. Series on money, banking, and credit with frequency ranging from weekly to annual.
Civil Aeronautics Board	Financial, mileage, and traffic data: Annual (monthly in less detail) domestic and United States international certificated air carriers, by company. Semiannual: Origin and destination traffic studies. Annual: Accidents involving aircraft.
Farm Credit Administration	Quarterly and monthly: Data on loans by affiliated lending agencies. Quarterly: Data on farm-mortgage recordings.
Federal Communications Commission.	Annual: Financial and operating data on communications industries; employment, compensation, pensions, and accidents for telephone and telegraph industries; number of telephones in homes, by States and principal cities. Annual: Financial data for networks, AM, FM, and television stations.
Federal Deposit Insurance Corporation.	Semiannual: Balance-sheet data, all operating banks, insured banks. Annual: Statistics on banks and deposit insurance.
Federal Power Commission	Monthly and annual: Electric-power statistics (production, capacity, by States, classes of ownership and types of prime movers). Annual: Financial and operating data on electric utilities and natural-gas companies.
Federal Trade Commission	Quarterly (jointly with SEC): Financial statement data for all United States manufacturing industries, classified by major industry group.

Statistical Activities of Federal Agencies—Continued

Agency	Principal economic statistics produced
Housing and Home Finance Agency: Federal Home Loan Bank Board.	Monthly statistics on savings and loan associations; nonfarm mortgage recordings and real-estate foreclosures; and on the Home Loan Bank System.
Interstate Commerce Commission	Railway statistics: Monthly operating data for Class I railways; annual operating and financial data all railways; annual accident figures, kind and cause, casualty rates; grade-crossing accidents. Quarterly: Revenue, expenses, and operating data for interstate Class I motor carriers; revenue and operating data for interstate water carriers, oil pipeline companies. Annual: Operating and financial data for interstate Class I motor carriers, interstate water carriers, interstate electric railways, oil pipeline companies.
National Science Foundation	Underway: Data on extent and direction of basic research and development work in sciences (completed for Federal Government; in process for institutions of higher education; future plan, for business and industry, foundations and trade associations, State governments).
Railroad Retirement Board	Monthly: Railroad retirement, unemployment insurance, and sickness insurance operations data. Annual: Number of beneficiaries, amount of benefits, financial operations, etc., under railroad-employee benefit and insurance plans.
Securities and Exchange Commission	Monthly and annual: Statistics on securities (offerings, trading on exchanges, etc.). Quarterly (jointly with FTC): Financial statement data for all United States manufacturing industries, classified by major industry group. Quarterly: Volume and composition of savings. Quarterly and annual (jointly with OBE): Plant and equipment expenditures, actual and forecast.
Selective Service System	Monthly: Classification of selective-service registrants. Annual: Registration, induction, deferment, etc., by States, under Selective Service System.
U. S. Civil Service Commission	Monthly: Civilian employment and turnover in Federal Government, by agency, by type of employment. Annual supplements to monthly data classifying employees by State in which their work is located, by salary grade.
U. S. Tariff Commission	Synthetic organic chemicals, production and sales: Annual, all disclosable data; monthly, selected chemicals and plastics and resins.
Veterans' Administration	Annual: Detailed data on status and activities of Federal programs for veterans, their dependents, and survivors.
DEPARTMENT OF AGRICULTURE:	
Agricultural Research Service	Continuing: Analyses of costs and returns to farmers, profitable adjustments in farming, efficiency in use of resources; inventory and analysis of land resources: farm valuation, taxation, debt, tenure, risk, and insurance data.
Forest Service	Continuing: Timber-resources inventory consisting of area, volume, growth, and drain; lumber consumption; national-forests data on grazing, timber sales, miscellaneous uses, etc. Intermittent: Log and lumber prices.
Foreign Agricultural Service	Annual: Foreign agricultural production and consumption; international trade in agricultural products (based on Census Bureau data).
Agricultural Marketing Service:	
Agricultural Economics	Monthly or quarterly: Farm labor and wages, cash receipts from farm marketings. Quarterly: Per capita food consumption studies. Annual: Farm population, living standards, expenditures, and net income. Continuing: Analyses of economic situation and outlook for farm products.
Agricultural Estimates	Monthly: Indexes of prices paid (over 300 items) and received (about 50 items) by farmers, and parity ratio. Average prices published monthly, quarterly, seasonally, annually, depending on the commodity. Monthly: Crop acreage, yield, production, and stocks (major crops); data on livestock, dairy, and poultry products, etc. Annual: Acreage, yield, and production (about 125 crops); livestock and poultry production and inventories.
Marketing Research	Monthly: Consumer purchases of fresh citrus fruits, all canned juices; all frozen concentrated juices. Monthly: Consumer purchases of butter, margarine, all types of cheese, and nonfat dry-milk solids. Quarterly: Farm to retail price spreads and farmer's share of consumer's dollar for a market basket of farm food products, food commodity groups, and about 50 individual food products; and for cotton and tobacco products.
Commodity divisions (marketing services).	Continuing: Market News Reports (current information on marketing of agricultural commodities, quality, prices, arrivals in specific markets, commodity movements, market conditions)-

Statistical Activities of Federal Agencies—Continued

Agency	Principal economic statistics produced
DEPARTMENT OF COMMERCE:	
Bureau of the Census:	
Business	Monthly: Wholesale trade reports (aggregates of reported sales and inventories) by kind of business and geographic division. Monthly: Retail trade reports (sales or receipts) by kind of business, national and selected large cities. Annual: Survey of retail, wholesale, and selected service trades. Periodic: Census of business.
Industry	"Facts for Industry" series: Monthly, quarterly, and annual; shipments, production, stocks, and orders, about 50 commodities. Periodic: Censuses of manufactures and mineral industries; annual survey of manufactures providing intercensal data for this segment of the economy.
Foreign Trade	Monthly: Summary report of shipping weight of exports and imports by type of vessel, customs districts, ports, and trade areas. Monthly, quarterly, and annual: Merchandise exports and imports, value, country, commodity. Annual: Entrances and clearances, number and tonnage. Special foreign-trade and shipping statistics on cost basis to subscribers.
Population and Housing	Current Population Survey: Monthly, national estimates of labor force; periodic, population characteristics, special labor force reports, consumer income. Decennial censuses of population and housing. Occasional: Population estimates and projections; special censuses of incorporated places.
Governments	Quarterly: Survey of public employment, based on reports from large governmental units and a sample of smaller units. Annual: Financial statistics of States and cities over 25,000 population. Annual: Summary of governmental finances—national aggregates based on reports from large governmental units and a sample of small ones. Decennial censuses of governments (last taken for 1942).
Other	Annual (jointly with BOASI): County Business Patterns.
Office of Business Economics	Monthly: Estimates of manufacturers' inventories, sales, new orders, and unfilled orders. Monthly: Estimates of wholesale and retail trade, inventories and sales (based largely on Census Bureau surveys). Quarterly and annual: National income and product estimates, business investment, consumer expenditures, and related series. Quarterly and annual (jointly with SEC): Expenditures for new plant and equipment, actual and forecast. Quarterly: Estimates of balance of international payments. Quarterly: Government expenditures abroad, by program and country.
Bureau of Foreign Commerce	Monthly: Exports and imports, indexes of quantity, price, and total value, by major economic commodity groups. Continuing: Economic analyses of foreign trade, United States and other countries.
Bureau of Public Roads	Annual: Motor-vehicle registrations, by State, by type of vehicle. Annual: Construction, finances, and administration of highways. Continuing: Traffic characteristics, volume, weights, and types.
Business and Defense Services Administration.	Monthly (jointly with BLS): Construction activity. Quarterly: quantity of raw materials and metals sold under priority ratings. Special studies for particular industries, including regular monthly report for construction and building materials industry and quarterly reports for containers and packaging industry and pulp and paper and board industry.
Civil Aeronautics Administration	Continuing studies on characteristics and utilization of airports, airways, and air-navigation facilities. Annual: Registered aircraft, distribution and utilization.
Maritime Administration	Quarterly: Employment report of United States merchant fleet. Semiannual: World merchant fleets—types, tonnage, and country. Annual: Deliveries of new merchant ships, by countries. Occasional: Employment and wages in United States maritime industry.
Weather Bureau	Climatological data: Monthly and annual for States and Territories; weekly summaries of weather and crop conditions. Daily: Weather data and flying conditions.
DEPARTMENT OF DEFENSE:	
Army Corps of Engineers	Annual: Characteristics of vessels using United States channels, waterways, and ports; weight and type of commodities carried.
Departments of the Army, Navy, and Air Force.	Monthly: Value of procurement contracts placed, receipts of goods and services, expenditures for procurement, and unexpended appropriation balances available.

Statistical Activities of Federal Agencies—Continued

Agency	Principal economic statistics produced
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE:	
Public Health Service:	
National Office of Vital Statistics.	Weekly: Morbidity and mortality statistics. Monthly and annual: Births, deaths, infant deaths, marriage licenses, and divorces. Annual: Life tables.
Other	Annual: Population movement, admissions and separations, administrative data of mental-disease hospitals.
Office of Education	Annual: Survey of degrees granted, by school, by major subject, by degree (special survey of engineering graduates). Biennial: Survey of elementary and secondary school enrollment, personnel, finances, administrative units. In process: Report on present and future needs for school facilities.
Social Security Administration, Bureau of Old-Age and Survivors Insurance.	Monthly and annual: Data on benefits and beneficiaries under old-age and survivors insurance. Annual: Employment, wages, and insurance status of workers in covered employment. Annual (jointly with Census Bureau): County Business Patterns.
Bureau of Public Assistance	Monthly and annual: Recipients and payments under public-assistance programs, by State.
DEPARTMENT OF THE INTERIOR:	
Bureau of Mines	Weekly, monthly, or quarterly: Production, consumption, shipments, and stocks of important minerals and mineral products; coal-mine injuries and employment. Annual (Minerals Yearbook): Production and shipments, principal mines, average value, prices, consumption, stocks, foreign trade, reserves, etc., for mineral products. Annual: Accidents in mineral industries (coal mines, quarries, metal and nonmetal mines, oil and gas industry).
Bureau of Reclamation	Continuing: Reports on irrigation systems, status of irrigable lands, and related data on construction and operation of irrigation projects.
Fish and Wildlife Service	Annual (United States Fishery Statistics): Quantity and market value of fish catches (by specie and type of gear), arrivals at important markets, manufactured products; cold-storage holdings. Special report on fishery and fur-seal industries in Alaska.
DEPARTMENT OF JUSTICE:	
Bureau of Prisons	Annual: Statistics on Federal prisoners, including age, sex, type of offense, number of commitments and discharges, etc. Annual: Statistics on Federal parole, probation, etc.
Federal Bureau of Investigation	Semiannual: Uniform Crime Reports, offenses known to police in cities and selected rural areas; arrest data.
Immigration and Naturalization Service.	Continuing: Alien registration, immigration and emigration statistics, applications for and certificates of naturalization.
DEPARTMENT OF LABOR:	
Bureau of Labor Statistics:	
Manpower and employment statistics.	Monthly: Employees in nonagricultural establishments, hours and earnings for United States, States, and 100 areas; labor turnover in manufacturing industries. Quarterly: Employment of women in manufacturing industries. Continuing: Occupational outlook and manpower analyses.
Prices and cost of living	Consumers' prices (cost of living): Monthly national index and 5 cities, quarterly 15 cities. Wholesale prices monthly, weekly, and daily (22 sensitive commodities). Occasional: Surveys of household consumption.
Productivity and technological developments.	Studies of labor productivity and unit-labor requirements for entire industries and for particular processes in selected plants. Future plan: Periodic indexes of labor productivity for all manufacturing.
Wages and industrial relations	Occupational wage rates in selected industries and communities, hourly earnings distributions, wage changes, collective bargaining agreements, work stoppages.
Construction statistics	Monthly: Nonfarm housing starts; construction activity (jointly with Commerce Department); urban building authorized (permits issued), for States and selected cities.
Industrial injuries	Industrial accident rates, cause studies.
Other	Foreign labor conditions.
Bureau of Employment Security	Weekly: Unemployment-insurance claims, by State. Monthly: Placement and unemployment insurance activities of affiliated State agencies. Bimonthly: Classification of major labor-market areas in accordance with relative adequacy of local labor supply. Quarterly: Employment and wage data in covered industries, National and State totals.

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I. GENERAL COORDINATION

The statistical organization of the Federal Government has developed in a decentralized pattern, with different agencies having responsibilities for the collection, compilation or analysis of statistical data in specified areas. Though this decentralization has marked advantages, it requires a central statistical office to prevent duplication and to achieve an integrated and accurate system of governmental statistics.

II. GENERAL-PURPOSE STATISTICAL AGENCIES

The primary function of these agencies is collection, compilation and publication of statistics for general use in specified fields. Each of these agencies is responsible for the regular collection, analysis and publication of data in specified fields. Taken as a group, they account for a large proportion of Federal statistical activities.

STATISTICAL BRANCHES OF AGRICULTURAL MARKETING SERVICE
(Dept. of Agriculture)

Statistics on crop and livestock production; prices received and paid by farmers; farm income; food consumption; marketing margins; farm population and labor; market news.

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III. ANALYTIC AND RESEARCH AGENCIES

These agencies are major users of data collected in the first instance by the public-purpose agencies, the administrative and regulatory agencies, and private sources. They are particularly important in the compilation, analysis and interpretation of statistics, though a number of them also engage in the direct collection of statistics for general use.

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DIVISION OF AGRICULTURAL ECONOMICS
(AMS, Dept. of Agriculture)

Analyses of economic situation and outlook fo
products. Research and statistical studies on
population, costs, prices and income.

PRODUCTION ECONOMICS RESEARCH BRANCH
(ARS, Dept. of Agriculture)

Analyzes problems of achieving balanced production and profitable returns to farmers. Compiles basic statistics on agricultural finance, farm costs and returns, and agricultural productivity.

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DERAL STATISTICAL SYSTEM

OFFICE OF STATISTICAL STANDARDS
(Bureau of the Budget)

Develops a single coordinated statistical system in the Federal Government. Prevents duplication of statistics and reduces reporting burdens. Develops and enforces standards for the quality and comparability of data.

BUREAU OF LABOR STATISTICS
(Dept. of Labor)

atistics on non-agricultural employment, earnings, anhours, and wage rates; wholesale and retail ices; urban consumers' price indexes; selected ousing and construction statistics.

BUREAU OF THE CENSUS
(Dept. of Commerce)

Censuses of population, housing, agriculture, manufactures, mineral industries, business, governments. Current statistics in these areas, and in foreign trade and shipping.

NATIONAL OFFICE OF VITAL STATISTICS
(Dept. of Health, Education and Welfare)

Statistics on births, deaths, marriages, divorces, morbidity; life tables.

COUNCIL OF ECONOMIC ADVISERS
(Executive Office of the President)

nalyses of economic data on the general economic tuation, and appraisal of related Federal activiis. Assists the President in preparation of his onomic reports to the Congress.

OFFICE OF DEFENSE MOBILIZATION
(Executive Office of the President)

Analyses of data relating to defense requirements in relation to supplies of critical materials, industrial facilities and manpower to determine stockpile objectives and expansion goals.

ECONOMICS
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OFFICE OF BUSINESS ECONOMICS
(Dept. of Commerce)

Estimates of national income; gross national product and related data on business developments; analyses of business trends; estimates of foreign investments and the balance of international payments.

DIVISION OF RESEARCH & STATISTICS
(Board of Governors of the Federal Reserve System)

Analyses economic and credit conditions for the Board. Prepares and publishes statistics on money, banking, industrial production, consumer credit, and department store activities for general public use.

BUSINESS & DEFENSE SERVICES ADMIN.
(Dept. of Commerce)

dustry Divisions of this agency analyze and diseminate information on the condition and levels of usiness activity in specific industries and trades.

BUREAU OF FOREIGN COMMERCE
(Dept. of Commerce)

Analyses of data compiled by the Census Bureau on U. S. foreign trade, and of data on trade and production of other countries.

BUREAU OF MINES
(Dept. of the Interior)

Current statistics on production, consumption and stocks of metals, mineral fuels and other nonmetallic minerals; employment in mineral industries. Studies and analyses in these areas.

III. ANALYTIC AND RESEARCH AGENCIES

These agencies are major users of data collected in the first instance by the public-purpose agencies, the administrative and regulatory agencies, and private sources. They are particularly important in the compilation, analysis and interpretation of statistics, though a number of them also engage in the direct collection of statistics for general use.

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DIVISION OF AGRICULTURAL ECONOMIC
(AMS, Dept. of Agriculture)

Analyses of economic situation and outlook fo
products. Research and statistical studies on
population, costs, prices and income.

PRODUCTION ECONOMICS RESEARCH BRANCH
(ARS, Dept. of Agriculture)

Analyzes problems of achieving balanced production and profitable returns to farmers. Compiles basic statistics on agricultural finance, farm costs and returns, and agricultural productivity.

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IV. ADMINISTRATIVE, REGULATORY AND DEFENSE AGENCIES

These agencies provide many important and valuable statistical series used by the public and other agencies of the Government. They collect statistical information primarily as part of their administrative and operating responsibilities, such as national defense, the collection of taxes, administration of employment security, and regulation of public utilities, though a few of them have specialized statistical responsibilities.

OTHER AGENCIES AND UNITS LOCATED IN EXECUTIVE DE

AGRICULTURE
- a - Forest Service
- b - Commodity Exchange Authority
- c - Foreign Agricultural Service
- d - Farmers Home Administration
- e - Rural Electrification Administration
- f - AMS (Marketing Services Division)
- g - Agricultural Research Service (various branches)

COMMERCE
- a - Civil Aeronautics Admin.
- b - Maritime Administration
- c - Bureau of Public Roads
- d - Bureau of Foreign Commerce
- e - Bus. and Defense Services Admin.
- f - Weather Bureau

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LABOR
- a - Bureau of Employees' Compensation
- b - Bureau of Employment Security
- c - Wage, Hour, & Public Contracts Div.
- d - Women's Bureau

HEALTH, EDUCATION AND WELFARE
- a - Social Security Administration
  - Bur. of Old Age & Survivors Ins.
  - Bur. of Public Assistance
- b - Children's Bureau
- c - Office of Education
- d - Office of Vocational Rehabilitation
- e - Public Health Service

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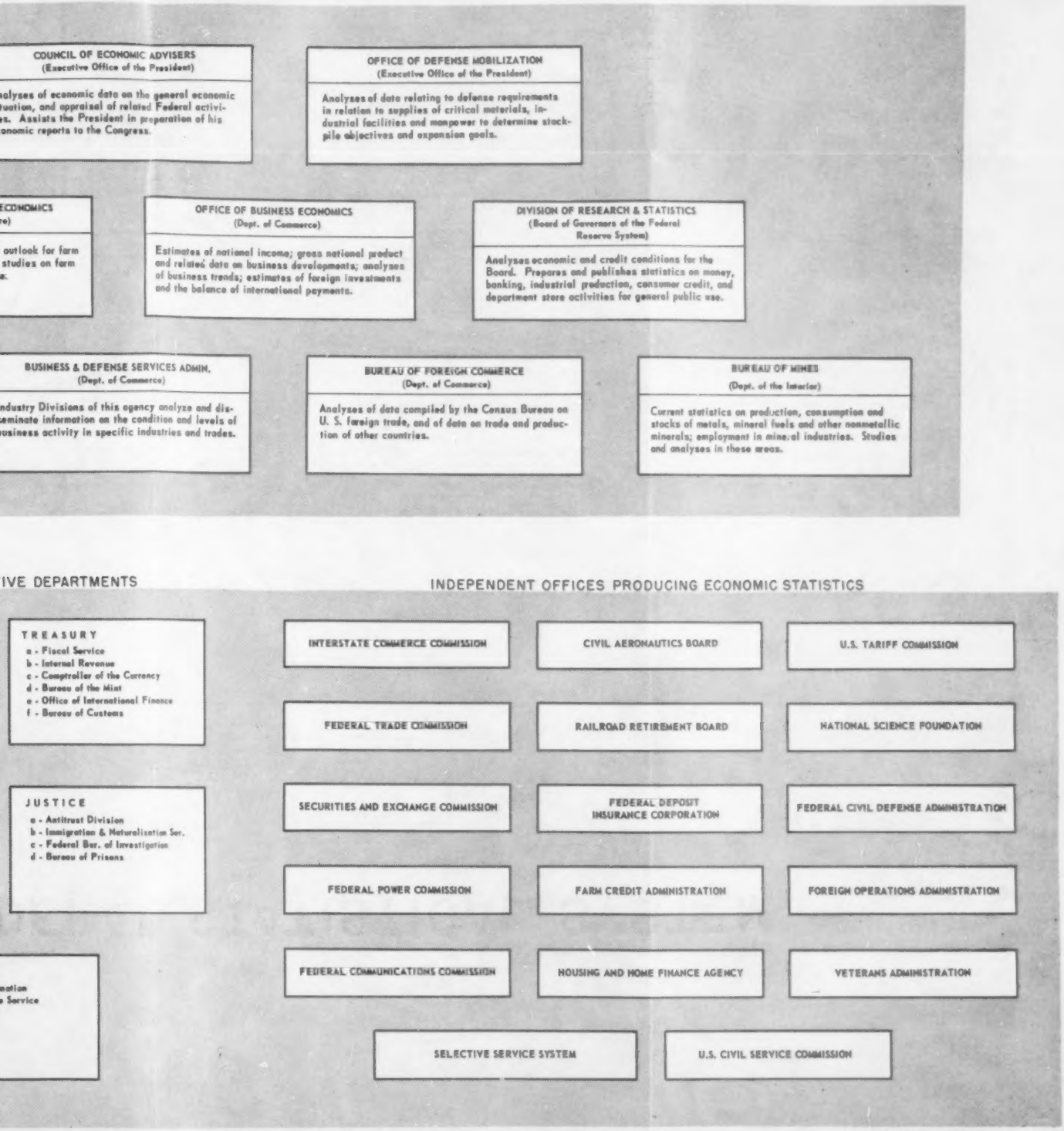
DEFENSE
- a - Army, Navy and Air Force produce economic statistics on:
  - Expenditures
  - Contracts
  - Purchases.
- b - Board of Engineers for Rivers and Harbors

INTERIOR
- a - Bureau of Reclamation
- b - Fish and Wildlife Service

EXPLANATORY NOTE

This chart arranges the various agencies and units in a manner indicating the essential structure of the statistical activities of the Federal Government. Only those agencies and units whose statistical functions are fairly readily identified are included. Some of the agencies might well be listed under several of the major categories, but to prevent excessive detail, they are, as far as practicable, classified under a single category. While all agencies have some performance or operational data, this chart includes such statistics only when they have also been adapted for general analytic use, especially of an economic character.


COUNCIL OF ECONOMIC ADVISERS
(Executive Office of the President)
nalyses of economic data on the general economic
tuation, and appraisal of related Federal activi-
es. Assists the President in preparation of his
onomic reports to the Congress.
OFFICE OF DEFENSE MOBILIZATION
(Executive Office of the President)
Analyses of data relating to defense requirements in relation to supplies of critical materials, industrial facilities and manpower to determine stockpile objectives and expansion goals.
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OFFICE OF BUSINESS ECONOMICS
(Dept. of Commerce)
Estimates of national income; gross national product and related data on business developments; analyses of business trends; estimates of foreign investments and the balance of international payments.
DIVISION OF RESEARCH & STATISTICS
(Board of Governors of the Federal Reserve System)
Analyses economic and credit conditions for the Board. Prepares and publishes statistics on money, banking, industrial production, consumer credit, and department store activities for general public use.
BUSINESS & DEFENSE SERVICES ADMIN.
(Dept. of Commerce)
ndustry Divisions of this agency analyze and disseminate information on the condition and levels of usiness activity in specific industries and trades.
BUREAU OF FOREIGN COMMERCE
(Dept. of Commerce)
Analyses of data compiled by the Census Bureau on U. S. foreign trade, and of data on trade and production of other countries.
BUREAU OF MINES
(Dept. of the Interior)
Current statistics on production, consumption and stocks of metals, mineral fuels and other nonmetallic minerals; employment in mineral industries. Studies and analyses in these areas.
IVE DEPARTMENTS
INDEPENDENT OFFICES PRODUCING ECONOMIC STATISTICS
TREASURY
a - Fiscal Service
b - Internal Revenue
c - Comptroller of the Currency
d - Bureau of the Mint
e - Office of International Finance
f - Bureau of Customs
JUSTICE
a - Antitrust Division
b - Immigration & Naturalization Ser.
c - Federal Bur. of Investigation
d - Bureau of Prisons
nation
Service
INTERSTATE COMMERCE COMMISSION
CIVIL AERONAUTICS BOARD
U.S. TARIFF COMMISSION
FEDERAL TRADE COMMISSION
RAILROAD RETIREMENT BOARD
NATIONAL SCIENCE FOUNDATION
SECURITIES AND EXCHANGE COMMISSION
FEDERAL DEPOSIT INSURANCE CORPORATION
FEDERAL CIVIL DEFENSE ADMINISTRATION
FEDERAL POWER COMMISSION
FARM CREDIT ADMINISTRATION
FOREIGN OPERATIONS ADMINISTRATION
FEDERAL COMMUNICATIONS COMMISSION
HOUSING AND HOME FINANCE AGENCY
VETERANS ADMINISTRATION
SELECTIVE SERVICE SYSTEM
U.S. CIVIL SERVICE COMMISSION

EXECUTIVE OFFICE OF THE PRESIDENT
Bureau of the Budget
June 15, 1954

49377 O - 54 (Face p. 34)

Statistical Activities of Federal Agencies—Continued

Agency	Principal economic statistics produced
DEPARTMENT OF THE TREASURY:	
Internal Revenue Service	Annual: Tax, income and related data from income-tax returns. Miscellaneous production and other statistics on taxed commodities.
Fiscal Service	Daily, monthly, and annual series covering receipts, expenditures, public debt, stock and circulation of money, and other aspects of Federal finance.
Bureau of the Mint	Annual: United States and foreign data on coinage and precious metals.
Comptroller of the Currency	Annual: Statistics on national banks and on all banks in United States. Occasional: Detailed balance sheet data for national banks.
Office of International Finance	Monthly: International capital movements.

APPENDIX D

STAFF MEMORANDUMS

Memorandums prepared by members of the professional staff of the Office of Statistical Standards, Bureau of the Budget, in response to questions raised by Chairman Talle of the Subcommittee on Economic Statistics, Joint Committee on the Economic Report, in his letter of April 28, 1954, to the Director of the Bureau of the Budget.

The individual views and recommendations on major needs for improvement of statistics within specific areas do not necessarily have the approval of the Budget Bureau. They are presented without change or endorsement as an appendix to the Bureau's report to the Subcommittee on Economic Statistics.

No.	Subject	Author
1	Statistics on the Economic Status of Farmers	O. A. Negaard.
2	The Adequacy of Price Indexes	Laura Mae Webb.
3	Adequacy of Statistics on Business Conditions	C. P. Modlin.
4	Adequacy of Construction and Housing Statistics	Paul F. Krueger.
5	Foreign Trade and Shipping Statistics	J. P. Cavin.
6	Balance of International Payments	Edward T. Crowder.
7	Federal Reserve Index of Industrial Production	Y. S. Leong.
8	Adequacy of Statistics on Production of Minerals	Y. S. Leong.
9	Measuring Production of Agricultural and Forest Products	Harold T. Lingard.
10	Money, Credit, and Federal Financial Data	Edward T. Crowder.
11	Statistics of State and Local Government Finances	Dana M. Barbour.
12	Current Employment and Unemployment Statistics	Margaret E. Martin.
13	Wage and Related Statistics	Dana M. Barbour.
14	Adequacy of Productivity Statistics	Robert B. Steffes.
15	The Adequacy of Statistics on the Characteristics of the Population	Joseph W. Kappel and Alexander Gall.

Staff memorandum No. 1

STATISTICS ON THE ECONOMIC STATUS OF FARMERS

By O. A. Negaard

Historical development

Gross and net farm income was first estimated by the Department of Agriculture in 1913 based largely upon data obtained in the 1910 Census of Agriculture. However, it was not until 1924 that current annual estimates were published, and these series began with the year 1919–20. Since then the income work has been carried on continuously, the earlier estimates have been revised and materially improved, and supplemented with new information from time to time. Monthly estimates of cash receipts from farm marketings began in 1925. In 1930 State estimates of gross and cash farm income were first made and in 1932 the estimates of gross farm income and the more important farm production expenses were extended back to 1909. Some of the series were designed especially to meet the legislative formula for determining "income parity" for agriculture as prescribed in the Soil Conservation and Domestic Allotment Act, as amended.

Available series

The Agricultural Marketing Service of the Department of Agriculture makes annual (calendar year) estimates for the United States of (1) cash receipts from farm marketings; (2) gross farm income; (3) farm operators realized net income; (4) net income of persons on farms from farming; and (5) net income from agriculture. Production expenses, market value of home consumption of farm products, and other data necessary in the computation of net income are also estimated on an annual basis.

The annual estimates of cash receipts from farm marketings are based upon information collected by the Department on the quantity sold and the average prices obtained by farmers for more than 125 commodities or commodity groups, each estimated separately. These estimates are also made monthly, but the current monthly estimates are subject to considerable revisions since the estimates must necessarily rest upon the assumption that the seasonal pattern of the volume of marketings in previous years is followed during the year. When information on the monthly distribution of marketings for each important commodity becomes available revisions are made in the monthly estimates of cash receipts from the farm marketings.

Estimates of annual gross farm income are obtained by adding to the estimates of cash receipts from marketings annual estimates of the following: (1) Value of home consumption of farm products; (2) rental value of farm dwellings; and (3) Government payments to farmers. Significant quantities of many farm products are consumed directly on farms on which produced and these are valued at prices received for the sale of similar products to obtain estimates of value of home consumption of farm products. The service provided by farm dwellings is also a source of income. The estimates of rental value of farm dwellings is an imputed rental value designed to represent what would have to be paid if the dwellings were rented separately. The Government payments to farmers are the moneys paid directly to farmers by the Federal Government in connection with its various farm programs.

The annual estimate of farm operators net realized income is obtained by deducting all production expenses from estimated gross farm income. Farm production expense is estimated from basic data that in most cases are considerably less complete and accurate than the basic data for estimating gross farm income. It includes overhead cost as well as current operating expenses. Some of the basic quantitative information necessary for estimating farm production expenses has been obtained from the decennial censuses of agriculture while some has been collected by special sample surveys.

The estimate of income of persons on farms from farming is obtained by adding to the estimates of farm operators net realized income estimated farm wages paid laborers living on farms, and allowing for net changes in the inventories held on farms for sale. The net change in the farm inventory is the net value at year-end prices of the physical change during the year in the inventories of crops that are held for sale, and in the inventories of all livestock. The net change in inventories will be added or deducted depending upon whether the net inventory change is positive or negative. Net income of persons on farms from farming and the corresponding estimates of income of persons not on farms are used in arriving at "income parity for agriculture."

Farm income changes rapidly in response to changes in economic conditions. The annual estimates of farm income do not fully reflect these changes. The Department consequently has prepared new quarterly series on gross and on net realized income of farm operators in terms of seasonally adjusted annual rates back to 1929, which will be released soon, and estimated currently. The quarterly changes in cash receipts from farm marketings, however, are primarily responsible for the changes in both gross and in net realized income of farm operators.

The two monthly series, Prices Received by Farmers, and Prices Paid by Farmers, are among the important series estimated by the Department reflecting on the economic condition of farmers. The parity index (the index of prices paid by farmers including interest, taxes, and wage rates) is important because it is used in computing parity prices of farm products and these are basic to the determination of price supports.

The parity ratio which is the ratio of the index of prices received by farmers to the parity index is also one of the important indicators of the effect upon farmers of changing economic conditions. It is, however, an indicator of changing price relationships and does not reflect the increased efficiency in farm production and increased volume of agricultural production as these affect farm income independent of price changes.

Recommendations

The annual estimates of cash receipts from farm marketings and of gross farm income are considered quite reliable since these estimates are based on a comprehensive body of data collected by the Department of Agriculture. The accuracy of the estimates of farm expenditures, however, is open to considerable question and this affects the estimates of net income and especially the parity index. The weights used in constructing the parity index is outdated (1937–41). There has been a tremendous technological change in farm production practices during the past 15 years and as a consequence the pattern of farm production expenditures has changed drastically. There is consequently an urgent need for a national enumerative survey of farmers' buying practices and expenditure patterns for items purchased for farm production purposes as well as for items bought for family living.

Staff memorandum No. 2

THE ADEQUACY OF PRICE INDEXES

By Laura Mae Webb

CONSUMER PRICE INDEX

Historical development

This index was initiated during World War I for use in wage negotiations, particularly in shipbuilding centers. Coverage was gradually extended to other industrial cities, and estimates of nationwide changes in living costs in large cities were published at intervals, beginning in October 1919. Annual estimates for the period 1913–18 were prepared, and regular publication (usually semi-annual) was established in February 1921. Weights used in the index were based on surveys of family expenditures conducted during 1917–19. Improved pricing techniques were developed in 1935 so that prices collected would relate, insofar as possible, to the same qualities of goods and services in all cities and from time to time. Quarterly indexes were introduced on a regular basis in 1936; monthly indexes are available from September 1940 to date.

A comprehensive revision of the index was completed in 1940, based on prices collected in 34 large cities, weighted by consumer spending patterns in 1934–36. In 1953 another comprehensive revision was completed, the principal features of which were: (1) Introduction of weights representing current spending habits of wage earner and salaried clerical workers' families residing in urban areas; (2) increase in the number of items priced—including such important additions as restaurant meals, used cars, and home purchase, and maintenance; (3) increase in the number of cities priced from 34 to 46 so as to include small as well as large cities; and (4) change in the base period from 1935–39 to 1947–49.

Indexes available

The national index is currently based upon prices collected on about 300 commodities and services in 46 cities, ranging in size from New York City to towns of 2,500 population. Prices are collected in each city at intervals of from 1 to 4 months, depending upon the size of the city. The national index and indexes for each of the 5 largest cities are published monthly; quarterly indexes are prepared for 15 other large cities. City indexes are not published for the other 26 cities priced for the national index. The following group and subgroup indexes are published for both the national and the individual city indexes:

All items:
- Food (including food away from home):
  - Food at home:
    - Cereals and bakery products
    - Meats, poultry, and fish
    - Dairy products
    - Fruits and vegetables
    - Other foods at home
- Housing:
  - Rent
  - Gas and electricity
  - Solid fuels and fuel oil
  - Housefurnishings
  - Household operation

All items—Continued
Apparel
Transportation
Medical care
Personal care
Reading and recreation
Other goods and services

Recommendations

The goods and services included in the current index are those required to maintain the level of living characteristic of urban wage earner and salaried clerical workers' families in 1952. In order to keep both the items and weights in the index representative of purchases being made by this group of consumers, provision should be made for studies of consumer expenditures at fairly frequent intervals.

There is considerable demand for national average prices for individual commodities. Average retail prices are now published regularly for foods and fuels. It is contemplated that such prices will soon be available for some additional commodity groups. For certain other groups BLS believes that some expansion of the number of outlets priced will be required in order to provide reliable national averages. The demand for such prices is so great that this work should be given high priority.

Measures of differences of absolute costs of living in various localities would be most useful in wage negotiations. The Bureau of Labor Statistics met these needs from 1946–50 by the compilation of the City Worker's Family Budget for 34 cities. To compute budgets currently would require additional tabulations of the 1950 Consumer Expenditure Survey for establishing current weights. Budgets could then be prepared for the 20 cities for which individual city consumer price indexes are published with only a relatively small amount of additional price work. Preparation of budgets for other cities would, of course, require a considerable amount of price collection. On a number of occasions in recent years the Federal Government has needed such measures of absolute costs for wage negotiations. For example, the Federal Government was seriously handicapped in wage negotiations in Alaska several years ago because comparisons of differences in absolute costs between specified Alaskan cities and Seattle, Wash., were not available. Whether such data for these particular cities continue to be needed will depend upon whether or not the Government needs a large civilian labor force in Alaska.

Many cities, as well as various labor groups and private employers, have requested Consumer Price Indexes for additional cities. This Office has taken the position that it is the responsibility of the Federal Government to provide a reliable national index, and that only city indexes which are byproducts of the compilation of the national index are the responsibility of the Federal Government.

Probably the most important gap in the price statistics program is the lack of a retail price index. The CPI is frequently used as a retail price index because of the lack of a better measure to serve this purpose. How great an error is involved in using the CPI for this purpose is not known; however, the CPI includes only those commodities and services typically purchased by urban wage earner and salaried clerical workers' families, weighted in accordance with the importance of these items in the average expenditures of such families. A true retail price index would represent all commodities and services sold at retail in the United States—that is, sales to rural as well as urban families, and qualities of commodities sold to high-income consumers and low-income consumers as well as to middle-income consumers and to families of all sizes and all occupations. If prices collected for the Consumer Price Index and for the Index of Prices Paid by Farmers for Family Living could be combined it is probable that little additional price data would have to be collected in order to provide the prices needed for such an index, since these two groups constitute such a large portion of the population. The greatest obstacle to undertaking this work at the present time is our lack of knowledge as to the effect the difference in philosophies under which prices for the two indexes are collected actually has on the prices reported. That is, for the CPI prices are collected for identical qualities, insofar as possible, from one pricing period to the next. For the Index of Prices Paid by Farmers, prices are requested on the qualities most commonly sold to farmers during periods to which the prices relate. Therefore, prices for the latter in-

dex should reflect not only pure price change, but differences in costs occasioned by farmers shifting purchases to better or poorer qualities of commodities and services. If a project such as I propose under Recommendations for prices paid by farmers is undertaken to determine the differences in prices reported in those outlets in the small cities in which prices are collected for both indexes, we would have some basis on which to estimate how much of an expansion in the price collection program would be required to provide the data for a retail price index.

INDEX OF PRICES PAID BY FARMERS

Historical development

This index was first published in 1928 with two major groups: Commodities used for family living; and commodities used for farm production. Annual estimates are available from 1910 and quarterly indexes from 1924. Since the passage of the Agricultural Adjustment Act of 1933 prices used in this index have provided the basic data for the determination of parity prices for farm commodities. In 1933 the index was revised to add some commodities and to introduce more current weights. Interest on indebtedness secured by farm mortgages and taxes on farm real estate were added in 1935. Monthly indexes have been released since January 1937. A revision of the index was made in 1950, the principal features of which were the introduction of 1937–41 weights, and a considerable expansion in the list of items priced, including the addition of data on telephone and electricity costs, and wages paid to hired farm labor.

Indexes available

The comprehensive index is published monthly, with indexes for the following groups and subgroups:

Prices paid by farmers:
- Commodities used for family living:
  - Food and tobacco
  - Clothing
  - Household operations
  - Household furnishings
  - Building materials, house
  - Autos and auto supplies
- Commodities used for production:
  - Feed
  - Livestock
  - Motor supplies
  - Motor vehicles
  - Farm machinery
  - Farm supplies
  - Building and fencing materials
  - Fertilizer
  - Seed
- Interest (payable per acre on farm real estate debt)
- Taxes (farm real estate taxes payable per acre)
- Wage rates (for hired farm labor)

Recommendations

It is important that the weighting pattern for the index be brought up to date. There were no nationwide data available for the determination of the 1937–41 weights which are used currently in the index, and for some of the items the estimated weights are based on fairly fragmentary data. A nationwide survey of farmers' buying habits and expenditures for both farm production and family living are needed in order to establish weighting patterns and to determine in which size towns and in what type outlets prices for the index should be collected.

Plans should be made for pricing important services such as medical and dental fees and hospital rates. At the present time the only services included in the index are for electricity and telephone, and newspaper subscriptions.

A study should be undertaken jointly by the Agricultural Marketing Service and the BLS to determine the difference in the price movement between the CPI and the Index of Prices Paid by Farmers for Family Living which results from the difference in the philosophies of the two indexes. That is, for the collection of prices for the CPI, detailed technical specifications are used to insure comparability of qualities priced, insofar as possible, from time to time

and from place to place. Agriculture endeavors to measure the changes in average unit costs to farmers for the various qualities of commodities they purchase from time to time, and to reflect differences between various geographic areas associated with differences in qualities purchased. Since the qualities of goods and services purchased by farmers vary from time to time, the index of costs to farmers may drop even though prices for fixed qualities have remained unchanged, or even increased. Conversely, the index may rise as farmers purchase better qualities, even though prices for fixed qualities remain unchanged or fall. The extent to which this difference in concept between the two indexes results in differences in the movements of the two indexes is not known. In order to determine the differences in the prices reported under these two techniques, I propose that the following work be undertaken:

(1) In those small cities in which there is a substantial overlap in the AMS and the proposed BLS outlet sample, the BLS field agents collect schedules for both agencies for a limited period of time from these outlets from which both want data. BLS agents would have to be instructed in the types of prices required by the AMS.

(2) Price economists in AMS field offices use both sets of schedules in collecting prices from chain outlets which they visit personally. These agents would need to be instructed in the use of BLS specifications.

(3) BLS undertake a survey to determine the extent to which reporters in outlets in small cities have positive knowledge regarding quality factors designated in BLS specifications.

(4) AMS undertake a survey to determine the extent to which reporters can in fact differentiate sales to farmers from sales to other customers.

After the completion of these surveys the results should be studied by a technical committee composed of representatives from AMS, BLS, and OSS. If it is determined that there is no significant difference between the prices reported under the two systems, plans should be made for a joint price-collection program to provide data from the small cities for the two existing indexes and for a retail price index. Data from (3) and (4) should indicate the type of price-collection program which is feasible in small cities. If the technical committee determines that there are significant differences between the prices reported for the two indexes, a policy committee should be formed by representatives from the three agencies (presumably different from the technical committee) to determine whether it is the policy of the Federal Government to use different types of statistical measures in gaging the welfare of two segments of the population. If it is decided that the same type of measure should be used for both indexes, steps should be taken to adjust the current programs accordingly. It is likely that only a little expansion of such a program would be required to provide sufficient data for a retail price index. If it is determined that the 2 indexes do differ significantly in what they measure, and that the 2 should be continued in the same manner as previously, the collection of data for a retail price index would probably require a major expansion in the retail price collection program.

WHOLESALE PRICE INDEX

Historical development

This index has been prepared monthly since 1902 as an indicator of general price trends and of average changes in commodity prices at primary market levels. The official series was carried back on a monthly basis to 1890; annual estimates, prepared jointly by the Bureau and by nongovernmental agencies and individuals, have been calculated back to 1749. The index was revised in 1927, when postwar weights were introduced and the number of commodities priced was increased from 400 to 550. The principal feature of the 1930 revision was the expansion in coverage to include nearly 800 items—most of the expansion being in the field of manufactured commodities. The 1952 revision marked an advance in several respects—some important groups formerly either completely omitted or inadequately covered were included, accounting for much of the expansion from 900 to 2,000 items priced; the new weights, based on 1947 data, accounted for sales of all commodities at primary market levels; several price quotations are now obtained for most items included in the index (so that about 5,000 individual prices are used in the computation of the index), whereas previously only one quotation was obtained for most items; and the base period was changed to 1947–49=100. Prior to the 1952 revision, the monthly price represented the average of weekly quotations; in the revised index the monthly price relates to only one date— usually Tuesday of the week containing the 15th.

Technicians are not in agreement as to the extent this affects the reliability of the index as a measure of short-term changes.

A weekly index has been published since 1932. From 1932 to 1948 the coverage of the weekly index was the same as that for the monthly. From 1948 through February 1952 the index was based on a sample of all commodities priced for the monthly index. When the comprehensive revision of the monthly index was made in 1952, the weekly index was revised and is now calculated as a percent change from the latest published monthly index and represents the Bureau's best estimate of what the comprehensive index would be if all 5,000 individual prices were collected and the complete index calculated weekly. It is based on the actual prices of a small sample (fewer than 200) of the commodities included in the monthly index and on the estimated prices for all other commodities.

A daily Index of Spot Market Prices for 22 commodities is also published. These commodities have been selected to measure movements of commodities particularly sensitive to factors affecting spot markets; all the commodities are raw materials or are close to the initial production stage. This index does not predict the trend of the weekly and monthly indexes. This index was introduced in November 1952 and is not a continuation of the daily index published previously.

Indexes available

In addition to the comprehensive index, indexes are released each month for 15 major groups such as metal and metal products and chemical and allied products, for 88 subgroups such as nonferrous metals and industrial chemicals, for over 200 product classes and for most of the approximately 2,000 individual items. In addition, 16 special group indexes (e. g., metal working machinery) are published each month.

The all-commodities index and 16 subgroup indexes are published weekly.

For the daily Spot Market Price Index, an all-commodities index and six subgroup indexes are published; in addition, the price for each of the 22 commodities in the index, and the prices of 5 additional items which are important in spot markets but which are not included in the index, are published.

Recommendations

Considerable progress was made at the time of the 1952 revision in developing techniques for pricing many types of highly fabricated products. However, no reliable measure of price movement could be obtained for certain commodities such as ships, railroad rolling stock, fabricated plastic products and custom-made machinery. On the basis of advice from industry experts, the BLS assigned the weight for these commodities to other commodities, or groups of commodities, whose price movements were believed to best represent the trend of the unpriced commodities. The Bureau needs a continuing program of research to try to develop techniques for pricing these commodities directly, and to study pricing techniques currently used in other commodity areas to determine whether they continue to provide reliable measures of price movement.

Criticism continues to be directed at the use of producers' quotations in the index because in periods of extreme shortages or in a buyers' market, substantial sales are made either above or below the quoted prices. Such criticism has recently been made relative to the steel quotations. The BLS has on occasion requested funds to make surveys to determine to what extent quoted prices are representative of actual sales prices in selected commodity areas. These requests have not been approved by the Bureau of the Budget on the basis that such surveys would not provide a measure of the reliability of the whole index, but only for a very limited area of the index for a short period of time. We have felt that such studies would be both informative and helpful, but have believed other price-statistics programs were in more urgent need of funds. Price indexes are constructed to measure trend, not absolute levels of prices. Within the funds that it is conceivable would be available for price-index work, we cannot hope to make continuing studies of absolute levels of prices. Therefore, in emergency situations which require such data, specific studies will have to be undertaken as was done for the Office of Price Administration and the Office of Price Stabilization.

Consideration should be given to the initiation of indexes relating to prices paid by the Government for both military and nonmilitary goods. For goods of a nonmilitary character, problems of pricing are probably not very different from those relating to purchases by non-Government sources at primary market

levels. While the need for such an index has been expressed by various Government agencies for analytical work, little study has been given to this problem by any statistical agency. Indexes of contract prices for military procurement were computed by the Navy and by the War Departments during World War II. A number of factors had to be taken into consideration in the development of price series for these indexes that are not encountered in pricing representative civilian transactions—such as the allocation of lump-sum refunds resulting from renegotiation of contract prices, and the analysis of cost-plus-a-fixed-fee contracts which are typically used in the purchase of certain types of military goods. The development of techniques for the pricing of highly fabricated items such as ships and custom-made machinery is essential for these indexes as well as for the Wholesale Price Index. Because of the specialized nature of many of the items which would be included in indexes of military purchases, and the necessity for having access to military contracts in the construction of these indexes, the responsibility for the computation of these indexes should probably remain with the Military Establishment.

Staff memorandum No. 3

ADEQUACY OF STATISTICS ON BUSINESS CONDITIONS

By C. P. Modlin

1. Financial Reports on Business

INCORPORATED BUSINESS

Historical development

The benchmark statistics on the financial position of United States business corporations are tabulations of data contained in Federal income tax returns filed with the Internal Revenue Service and published in Statistics of Income, Part 2. Statistics of Income, Part 2, provides a continuous series, beginning in 1916, of annual income statement and balance sheet data for United States corporations. Similar but less complete data are available in the annual reports of the Commissioner of Internal Revenue for the period 1909–16. In the past Statistics of Income, Part 2, has not been available until 3 or more years after the close of the year to which the data relate.

Recent-year and current estimates of the financial position of corporations have traditionally been whatever could be pieced together from the published reports of large corporations. In two areas the quality of current data has progressed considerably beyond that level: (1) companies in some of the federally regulated industries file current reports which provide the basis for reliable estimates on these industries, and (2) the financial reports program, conducted jointly by the Securities and Exchange Commission and the Federal Trade Commission, has provided since 1947 reliable quarterly estimates, by asset size and industry, of the financial position of the United States manufacturing corporations. Prior to 1947 there was, except for some of the regulated industries where virtually complete coverage was obtained, no systematic program for collecting, tabulating and publishing estimates of corporate financial trends based upon a sample which was in fact representative. In areas other than the two noted above, that same situation prevails today as far as financial statistics on corporations are concerned.

Available series

The Statistics of Income, part 2, data provide a rather complete continuous series, beginning in 1916, of annual income statement and balance sheet data for United States corporations, classified by receipts, size of company, industry, etc. Because the reports on which Statistics of Income is based are the Federal income-tax filings, the data have limitations for some purposes in that they are affected by tax laws and changes in tax laws. The users of these data must guard against drawing conclusions based upon trends shown by the data without first determining whether the trends merely reflect changes in income-tax laws. The notes which accompany the Statistics of Income publication contain ample warning when changes in tax laws have affected the data significantly. Sometimes, too, the data must be adjusted to insure their usefulness for other purposes than tax administration, whether or not changes in tax laws affect them significantly. The principal weakness of these data is that they have not been published until 3 or more years after the close of the year to which they relate.

Recent-year and current estimates of the financial position of corporations are based upon data ranging from very good to virtually nonexistent. The SEC-FTC financial reports program provides reliable quarterly estimates, by asset size and industry, of the income statement and balance sheet position of United States manufacturing corporations. Quarterly reports to Federal regulatory agencies by corporations in various regulated industries provide reliable quarterly estimates for corporations in those industries. Together these two sources provide reliable quarterly estimates for industries which earned approximately 65 percent of corporate profits before taxes in 1947. Estimates for industries which earned approximately 20 percent of 1947 corporate profits before taxes are based upon data from the published reports of individual companies in those industries. The representativeness of these corporations is much less adequate than that of the manufacturing and regulated industries. Estimates for corporations representing the remaining 15 percent of 1947 corporate profits before taxes are the least reliable; little or no current financial data are available on the corporations in these industries.

This statement on the available statistics on corporate financial reports is merely a brief summary. For a detailed statement on these statistics, see pages 84–90 of the 1951 National Income Supplement of the Survey of Current Business.

Recommendations

The benchmark statistics contained in Statistics of Income, part 2, are high-quality, relatively low-cost data obtained as a byproduct of the process of administering our tax laws. Generally, these data are adequate as benchmarks.

The principal limitation of these data is that they have not in the past been published until 3 or more years after the close of the year to which they relate. The Internal Revenue Service is very conscious of this limitation of the data, since the IRS is a major user as well as the producer of them, and it has recently revised its procedures for processing income-tax returns in such a way that the time lag of availability of the statistics should be reduced to approximately 2 years in the near future. Without demeaning the very real accomplishment which reducing the lag to 2 years would be, or the improved usefulness of the data which this reduction of the lag would achieve, it is nevertheless true that maximum usefulness of the tax returns tabulations can be achieved only if the lag can be reduced to 1 year or less. Preliminary estimates based upon a smaller sample of corporations than are the published tabulations would suffice, but the earlier availability of estimates is important.

Reducing this time lag to 1 year or less is not a simple matter. The tax returns tabulations are a byproduct of the process of tax administration and cannot interfere with the administrative uses of the returns. This is why there has been a delay in the availability of the tabulations. The tabulations cannot be made available within a year unless a tabulation procedure which shortcuts, but which does not interfere with, the administrative uses of the returns can be developed. Such a procedure has been considered tentatively and seems to be within the realm of feasibility, though its technical and administrative problems need careful consideration.

A technical limitation of the Statistics of Income data which has also been recognized but for which there is no simple solution, lies in the system used by IRS to classify corporations industrially. The system is one of self-classification by the respondents. The limitation is that even with the best of intentions on the part of the respondents and the clearest of instructions, consistency of method of classification is virtually impossible to achieve under a system of self-classification. The preferred alternative is for the classification codes to be assigned by a single group in the data-collecting agency, the codes being based upon relatively simple classification information filed by the respondents. The fact that additional information would have to be collected purely for the purpose of classification has been the major bar to shifting from the system of self-classification.

The most urgent improvements needed in current data on corporate financial position are: (1) an expansion of the SEC-FTC financial reports program to cover wholesale trade, retail trade and mining corporations; (2) preliminary estimates, to be available within 60 days after the close of the quarter, for certain income statement items in the financial reports program; (3) a new sample of manufacturing corporations for the financial reports program; and (4) reliable data covering segments of the economy, other than trade and mining, for which reliable data are not now available and which can probably be covered more appropriately by agencies other than SEC and FTC. The trucking industry is one of the more important of these areas.

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The first of these improvements, i. e., expansion of the financial reports program to cover trade and mining corporations, would by itself provide reliable current estimates for industries which earned 25 percent of corporate profits before taxes in 1947 and thus would increase the adequacy of current financial statistics on corporations substantially. A program covering trade corporations was conducted by SEC and FTC during 1951 and 1952 with funds provided by the economic stabilization agencies but had to be dropped when the stabilization agencies and their need for the data ceased to exist and funds were not available to continue the collection of data for general economic uses. The second recommended improvement, i. e., preliminary estimates, would provide estimates for a few crucial income statement items within 60 days after the close of the quarter. The published report is not normally available until 90–120 days (depending on the quarter) after the close of the quarter; in times of economic uncertainty it is vital for several policy purposes that reliable estimates of the trend of corporate profits be known at the earliest possible time. The third improvement recommended, i. e., a new sample of manufacturing corporations, would serve two purposes: (1) it would relieve many small corporations of the burden of reporting quarterly financial information to a Government agency by, in effect, rotating them out of the present sample and rotating other corporations in, and (2) it would increase the reliability of the estimates by substituting an up-to-date sample for one which is becoming increasingly out of date in spite of all the collecting agencies can do to keep the sample current. The fourth improvement noted is of the same nature as the first one. It is listed separately only because the collecting agencies concerned might be different from those concerned with the first.

A request for an increase of $146,200 in funds for the fiscal year 1955 budget for the SEC–FTC financial reports program would have permitted realizing the first 3 of these recommended improvements. This request was denied by the Congress, however.

The reports on which financial reports estimates are based are company reports. Consequently, the estimates are subject to the same limitations with respect to "industry" detail as are noted in the following section on plant and equipment expenditures. As is noted in that section, this is not an easy limitation to remove.

The corporate form of organization comprises widely different proportions of the different segments of economic activity. Therefore, having adequate data for corporations would not in itself mean having adequate information on the financial position of all United States business. Unfortunately in this respect, the gaps in statistics on unincorporated business are more difficult to plug than are the gaps in our statistics on corporations.

UNINCORPORATED BUSINESS

Historical development

Data on unincorporated businesses are still pretty much at the horse-and-buggy stage of development. Even the benchmark data from tabulations of Federal income-tax returns have been produced for only a limited number of years in the past, and these have not been available until several years after the close of the period to which they relate. Fortunately, the outlook for better benchmark data in the future is encouraging. No reliable source of current financial statistics on noncorporate businesses has yet been developed.

Available series

The 1951 National Income Supplement of the Survey of Current Business summarizes (p. 70) the state of financial statistics on unincorporated business as follows: "Apart from farm income, which has been studied by the Department of Agriculture for many years, no comprehensive body of data covering any appreciable time interval exists for the income of unincorporated enterprises. Estimation in this field has generally required the laborious piecing together and adjusting of various type of data from numerous sources, some only inferentially connected with noncorporate business income."

Internal Revenue Service Statistics of Income, Part 1, data on sole proprietorship income are available for 1945, 1947, and 1949 (as well as for some earlier continue to be available on a biennial basis in the future. These plans also call for making partnership income data available biennially. The plans of Internal Revenue include reduction in the time lag between the close of a calendar year and the availability of tabulations for that year to 2½ years.

Because there are no reliable source materials upon which to base direct estimates of the current financial position of unincorporated businesses, any estimates of their current financial position are of necessity based upon scattered and only indirectly related data. For example, nonincorporate business income of some industries is estimated for the national income accounts by extrapolating separately sales and profits ratios, using the sales and profits ratios of the smallest sized corporations in those industries. The techniques of estimation are improved at every opportunity, but unless reliable source materials become available statistics on unincorporated businesses will remain one of our most serious statistical gaps.

A fuller discussion of the existing net income statistics on unincorporated businesses is contained in the 1951 National Income Supplement of the Survey of Current Business, pp. 72–76. Because "financial statistics" covers a much wider range than "net income" the statistical gaps on financial statistics are even wider than the very serious ones noted in the National Income Supplement discussion.

Recommendations

Plugging the gap in our current statistics on unincorporated businesses will be no simple matter. If the plan of the Internal Revenue Service to publish biennial data on both sole proprietorships and partnerships within 2½ years of the close of the year to which they relate can be achieved, the benchmark statistics would be immensely improved over anything that has been available in the past. A lesser delay, preferably one of no more than 1 year, would improve the usefulness of the benchmark data and the quality of the current estimates considerably more. Preliminary tabulations on a smaller sample basis would be quite adequate. The problems of producing tabulations on unincorporated business within 1 year are as great as those referred to in the discussion above of a similar proposal regarding incorporated businesses. The facilities available at IRS for doing such special work are limited, and the preliminary tabulations would have to compete for those facilities with one another and with other important types of special work. Nevertheless, the production of these preliminary tabulations in less than 1 year is not an impossible goal.

Before a program for producing reliable estimates of the current financial position of unincorporated businesses can be achieved, exploratory work will be needed to study and clarify the concepts to be measured, to examine and evaluate the alternative ways of making the estimates, and, if direct data collection from unincorporated businesses is determined to be necessary to the making of reliable estimates of their financial position, to study the data collection problems involved and develop a feasible program for collecting those data. Frequently in the past this type of systematic study of the feasibility of producing reliable statistics on unincorporated businesses has been recommended, but the sheer magnitude of the problem has discouraged the application of any substantial resources to it as long as there were other areas to which the resources could be applied with a greater certainty that they would produce tangible returns. Thus, for instance, resources were devoted to producing current financial statistics on incorporated businesses, current statistics on plant and equipment expenditures and expenditure plans, and data on monthly inventories and sales, rather than trying to collect financial data from unincorporated businesses. The results have justified those programs. Over the years the statistical gaps in many other areas are being plugged, and the gap in our statistics on unincorporated businesses looms larger and larger. It is the fact now that, as a letter to this Office from one of the Government's major centers of economic analysis states, "one of the major gaps in our knowlege of the operation of the economy relates to the incomes, investments and financing by unincorporated businesses." Estimates of national income and product, personal savings and private investment in particular could be made substantially more accurate if reliable estimates of only the net income of unincorporated business were available; fuller financial statistics on unincorporated business are needed for many other uses.

It is not possible at the present stage of our knowledge of the problems involved to specify the best way to obtain reliable estimates of the financial position of unincorporated business. That is why an exploratory program, rather than a specific program of data collection is recommended here. Some additional funds would be necessary to finance such an exploratory program. Something in the magnitude of $15,000 for 1 year should suffice for this purpose, and it should be expected that the details of a full program for producing reliable estimates would be presented at the conclusion of the 1-year exploratory study.

The two recommendations contained in this discussion on financial statistics on unincorporated business are related. Without knowing the details of the program for producing current financial statistics on unincorporated business which would be recommended at the end of a year of exploration, it is possible to say with considerable certainty that better estimates could be produced for the same expenditure of funds (or estimates of equal quality could be produced for a lesser expenditure of funds) if preliminary tabulations of the Internal Revenue Service data can be made available within 1 year of the close of the year to which they relate.

2. New Plant and Equipment Expenditures

Historical development

The current rate of business expenditures for new plant and equipment and the planned rate of expenditures during the immediate future are important indicators of the state of business confidence and, partially at least, determinants of the levels of output and employment. Before 1946, however, reliable data on aggregate capital expenditure plans in the United States did not exist. Attempts to estimate these expenditures indirectly by making extrapolations of past levels of plant and equipment expenditures on the basis of assumed relationships between these expenditures and other economic phenomena, such as consumer spending, business receipts, business profits, etc., have been unsuccessful. The importance of knowledge of the levels and trends of expenditures for new plant and equipment in the analysis of current and future business conditions encouraged the initiation of special surveys designed to obtain data on both past and anticipated plant and equipment expenditures directly from business organizations. One such program was initiated early in 1946 jointly by the Securities and Exchange Commission and the Office of Business Economics (Department of Commerce); in 1947 these agencies were joined in the survey by the Interstate Commerce Commission. The McGraw-Hill Publishing Co. conducts a similar survey the coverage of which begins with 1946. While the Bureau of Census does not collect data on anticipated expenditure, actual expenditures for new and used plant and equipment have been collected in the 1939 and 1947 Census of Manufactures and in the annual surveys of manufactures beginning in 1949.

Available series

In the plant and equipment expenditures survey conducted jointly by SEC, OBE, and ICC estimates are made for both actual plant and equipment expenditures for recent quarters (and calendar years) and anticipated expenditures for the two succeeding quarters (and calendar year). Estimates of anticipated sales are made annually. The estimates for current and future periods are extrapolations of benchmark estimates. The extrapolations are based upon annual and quarterly reports received by SEC, OBE, and ICC; the benchmarks for the estimates are aggregates of gross capital asset totals shown in the Federal income-tax returns filed with the Internal Revenue Service.

More detailed descriptions of the series can be found in the following articles: Irwin Friend and Louis J. Paradiso, Plant and Equipment Expenditures of United States Business, Survey of Current Business, January 1946, pages 17–19; Irwin Friend and Jean Bronfenbrenner, Business Programs and Their Realization, Survey of Current Business, December 1950, pages 11–20; Lawrence Bridge, Capital Expenditures by Manufacturing Industries in the Postwar Period, Survey of Current Business, pages 15–22; Lawrence Bridge and Vito Natrella, Capital Expenditures by Nonmanufacturing Industries, Survey of Current Business, August 1952, pages 19–23; and the section of New Plant and Equipment Expenditures in Historical and Descriptive Supplement to Economic Indicators, 1953, pages 32–33.

The McGraw-Hill series is published in two stages. In November of each year estimates of new plant and equipment expenditures for the subsequent year are published in Business Week, based upon a survey conducted in October. Early in the following year estimates based upon a survey conducted during the spring are published for that year and for the succeeding 3 years. The second report is larger than the first and contains, in addition to the estimates of past and anticipated future expenditures, indexes of capacity, estimates of the distribution of the expenditures between expansion and modernization, estimates of anticipated sales, and related items. For a fuller discussion of the larger McGraw-Hill report, see Business Plans for New Plants and Equipment 1954–57, McGraw-Hill Publishing Co., Inc., New York.

Recommendations

These recommendations relate only to the Federal Government series on plant and equipment expenditures.

The reliability of estimates of anticipations is difficult to ascertain. An estimate of anticipated expenditures for a period can be different from actual expenditures for the same period either because a different level of expenditures from that anticipated was actually made[9] or because of limitations in the estimating procedures and statistical techniques. In the past there have on occasion been marked differences between the SEC–OBE–ICC plant and equipment expenditures survey estimates of anticipated expenditures and actual expenditures for that same period, frequently because of important unanticipated developments which caused businessmen to change their plans, for example, the Korean outbreak in 1950.

Even though the reliability of these estimates of anticipated capital expenditures cannot be measured precisely, comparisons of "preliminary" and "final" estimates of actual expenditures for past periods suggest that limitations of the statistical techniques are sufficiently great to warrant correction.[10] Most important, the sample of companies used in this survey should be replaced by a larger, more representative sample to improve the estimates of both aggregate plant and equipment expenditures and the expenditures in individual industries.

Improvement in the sample used in this program should be made in conjunction with improvements needed in samples used in related Federal statistical programs. New samples of manufacturing corporations are needed for the SEC–FTC financial reports program, which provides quartely estimates of the financial position of United States manufacturing corporations and for the OBE monthly industry survey, which provides monthly estimates of manufacturers' sales, inventories, new orders and unfilled orders. A single sample, or a single sample and subsamples of it, should be used for the manufacturing corporations portion of all three of these surveys. Equally important with the improvement in the aggregate and individual industry estimates which a larger sample would permit in the plant and equipment expenditures and monthly industry surveys would be the fact that these three series, which should be closely related analytically, would in the significant area of manufacturing corporations be made consistent with one another at the data-collection stage.

There is need for improvement in the sample used in the plant and equipment expenditures survey for wholesale and retail trade. The current estimate of capital expenditures by trade companies are based essentially upon reports from corporations registered with SEC. The pattern of capital expenditures by companies in the distributive trades has been sufficiently unsettled in recent years to require a broader base for the estimates. The need for improvement in the capital expenditures estimates for trade is matched by the need for expansion of the SEC–FTC financial reports program to cover wholesale and retail trades corporations. It would be highly desirable for the improvements to be made coordinately, using the same sample of trade corporations. While this would still leave the quarterly estimates of capital expenditures by unincorporated trade companies without a solid foundation, it would fill a substantial part of the existing gap. The problem of obtaining current data directly from unincorporated businesses is an exceedingly complex and costly one and should be approached on a broader plane than that of any single survey. The collection of capital expenditures data by the Bureau of the Census as part of its census of business and its annual surveys of the distributive trades would be a valuable contribution to our knowledge of investment in the trades areas. It would be especially valuable in providing combined estimates, and possibly separate estimates, for the incorporated and unincorporated sectors of the trades and would provide thereby a basis for improving the quarterly estimates for the unincorporated portion.

Considerable improvement could also be made in the plant and equipment expenditures data on nonrail transportation and service trades investment by the development of a representative sample of companies in these fields.

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[9] See Irwin Friend and Jean Bronfenbrenner, Business Programs and Their Realization, Survey of Current Business, December 1950, pp. 11–20 for a discussion of the reasons for differences between the anticipated expenditures and actual expenditures of companies in the SEC–OBE sample.

[10] See Garfield V. Cox, Forecasting Expenditures for Plant and Equipment, Journal of Business, vol. XXVII (1954), p. 24, table 1.

The SEC–OBE–ICC series is based upon reports from companies and, accordingly, has the limitations of any statistical series based upon reports from such large units. Essentially, the fundamental limitation is that when reports from units covering such a wide range of activities as some companies do are classified into "industries" on the basis of primary activity, the estimates produced for some industries come to be of doubtful meaningfulness. This limitation cannot be removed easily. To refine the industry estimates requires obtaining reports covering the various departments or divisions of the large companies, and this can be burdensome, costly, or in some cases impossible, especially if attempted on a quarterly basis.

SEC and OBE use the same definitions and concepts of capital expenditures as does the Bureau of the Census in its collection of data on actual capital expenditures as part of the (scheduled) quinquennial censuses and the annual surveys of manufactures. The Census Bureau does not collect data on anticipated capital expenditures. Because the Census Bureau uses the establishment as the reporting unit whereas SEC and OBE obtain company reports, however, there are unavoidable differences between the two series in their estimates of expenditures by the same industry in some cases. The census data are needed on an establishment basis in order that they can be related to the considerable body of establishment data collected by the Census Bureau, the Bureau of Labor Statistics, and other agencies on shipments, employment, payrolls, fuel and electric power used, value added, etc. The SEC–OBE series is tied to a company basis of reporting through its being benchmarked on the Internal Revenue Service's Statistics of Income data, which are based upon reports from companies. While reconciliation of these two series is, for several technical reasons, not an easy task, a rather detailed reconciliation undertaken in conjunction with the next quinquennial Census of Manufactures would provide useful supplementary benchmark information for the SEC–OBE series, especially with respect to the individual industry estimates. In addition, as was noted above, the collection of capital expenditures data by Census in its census of business and annual surveys of the distributive trades would be a valuable contribution to our knowledge of investment in the trades areas.

Users of the quarterly capital expenditure plans data frequently express the need for separate estimates of plant expenditures and equipment expenditures. While the collecting agencies sympathize with this need, the collection problems associated with attempts to obtain reports on these expenditures separately have, except in the case of ICC, discouraged these attempts for the time being. There are several reasons why the data are difficult to obtain. For some industries—especially the electric utilities—the distinction between "plant" and "equipment" is so fuzzy for at least a part of their facilities that many companies do not show them separately in their records. Other companies can report separate data on an annual basis, but they have difficulty reporting it on a quarterly basis. Clearly a much higher rate of nonresponse has been experienced on the requests for quarterly data separately for plant and equipment than on the requests for such data on an annual basis. A possible reason for this higher nonresponse on the request for quarterly data is that the large corporations find the task of collecting, analyzing, and tabulating reports for their many establishments such a difficult one that they resist undertaking it. The Census Bureau has experienced virtually no difficulty collecting separate data for actual plant expenditures and actual equipment expenditures from establishments on an annual basis, and in fact obtain a higher rate of response than is obtained on the requests for similar annual data from companies. This suggests that all three factors, i. e., (1) quarterly data on (2) anticipated expenditures from (3) companies, contribute to the difficulty of obtaining the basic data on which the separate estimates would have to be based. These factors combine now to make the separate estimates not feasible in the SEC–OBE quarterly program.

The improvements in the plant and equipment expenditures estimates which these recommendations would, if made effective, achieve can be obtained at a relatively small cost, especially if some of them are undertaken in conjunction with other series. Without an increase in the funds available for use on this program, however, only minor improvements can be expected. The collecting agencies are getting excellent mileage out of the limited resources they have.

3. Inventories and Sales

WHOLESALE AND RETAIL TRADE

Historical development

Benchmark inventories and sales statistics for the distributive trades were first provided on an establishment basis by the 1929 census of business. Since that time censuses of business have been taken at irregular and, of late, infrequent intervals: 1933, 1935, 1939, and 1948. Annual surveys of retail trade were taken covering the years 1951–53. The first annual survey of wholesale trade was taken covering the year 1953. Funds have been requested for the taking of censuses covering 1954. Because the existing current trade inventories are sales statistics are based upon data collected from establishments, census benchmark statistics have a crucial importance in this area.

Benchmark statistics based upon corporation reports are contained in the Internal Revenue Service tabulations of data from Federal income-tax returns which are published in Statistics of Income, Part 2. This source provides annual benchmark statistics on corporations beginning with the year 1916. There is a lag of 3 or more years in the availability of these data, however.

Since the 1920's there has been a rather steady progression of improvement in the current statistics on inventories and sales in the distributive trades. The degree of improvement can be illustrated by comparing the types of inventories and sales data on retail trade contained in the May 1929 and May 1954 issues of the Survey of Current Business. The May 1929 issue contained sales indexes based on chain store sales for seven kinds of business in retail trade, indexes of department store and mail-order-house sales, and dollar volume of sales for individual "10-cent chains," restaurant chains, and mail-order houses. The one inventory level indicator from the whole of retail trade was the Federal Reserve index of department store inventories. The data available then were literally bits and pieces. The May 1954 issue contained estimated monthly dollar volume of sales, both adjusted and unadjusted for seasonal variation, for all retail stores and for approximately 25 kinds of business within retail; estimated inventories for all retail stores and 10 kinds of business; estimated sales, both adjusted and unadjusted, for firms with 11 or more stores; and indexes of department store charge accounts, collections, and sales by types of payment, in addition to series on rural sales of general merchandise, mail-order and store sales, and department-store sales and inventories indexes which have been developed by 1939.

The improvements in current inventories and sales data over this period are impressive but they do not lessen the need for considerable improvement in the quality of the data, especially the inventories data, which are available, and continued expansion in coverage of those areas which constitute statistical gaps.

Available series

Statistics on inventories and sales for past years which serve as benchmarks are available from the Bureau of the Census and the Internal Revenue Service. The census of business, which was last taken covering 1948, contains tabulations based on establishment reports of general-purpose economic data, including inventories and sales data. The annual surveys of retail trade covering 1951–53 and the annual survey of wholesale trade, first taken covering 1953, have provided or will provide adequate, though less complete, semibenchmark data for some purposes. Both of these annual surveys are sample surveys. Because these samples deteriorate after a few years as a result of changes in the business population which cannot be kept account of adequately, sample surveys should not be expected to be an adequate substitute for full censuses for long periods of time.

Statistics of Income, Part 2 (Corporations) contains tabulations of data from Federal income-tax returns filed by corporations with the Internal Revenue Service. The corporate inventories and sales data contained in Statistics of Income are adequate for general economic analysis, though adjustments in them may have to be made for some purposes. They are, of course, based on company reports. Their principal limitation has been the one referred to above, i. e., the lag in their availability of 3 or more years following the close of the year to which they relate. "Receipts" data, but no inventories data, are contained in Statistics of Income, Part 1 (Individuals).

Estimates of wholesale trade end-of-month inventories and monthly sales are being made now (June 1954) by the Office of Business Economics by

extrapolating benchmark estimates derived from the 1948 census of wholesale trade. The extrapolations are based upon mail reports received from a panel of merchant wholesalers reporting monthly to the Census Bureau under its monthly wholesale trade report program and upon supplementary data from other Government and private agencies.

Improvements in the quality of the wholesale trade inventories and sales data can be expected soon. Late in 1953 the Bureau of the Census redesigned its monthly wholesale trade report program and began collecting data from a probability sample of wholesale trade establishments, a substantially larger and more representative sample than the panel on which estimates are currently being based. Definitional problems and the usual difficulties associated with the installation of a new data-collection program have made it necessary to delay publication of estimates under the new program until after a revised benchmark based upon the first annual survey of wholesale trade (1953) can be established. The new Census Bureau program will then provide direct estimates of kind-of-business of total inventories and sales of merchant wholesalers. Estimates of inventories and sales trends will be made for the more important kinds of business for geographical regions.

Monthly estimates of retail sales, unadjusted for seasonal variation, are derived directly from a monthly sample survey conducted by the Bureau of the Census. A random sample of retail trade establishments, stratified by size and by kind of business, is used. The estimates of sales are computed directly from the reported sales of stores in the sample by weighting the sales of each establishment in the sample by a value dependent upon its probability of selection. Sales trends estimates are made for various kinds of business and for geographical areas. Adjustments for seasonal variation are made by the Office of Business Economics. The estimates are published in two stages: (1) Preliminary estimates for the Nation and for a limited number of kind of business are published approximately 10 days after the close of the month to which they relate, and (2) final estimates in considerably more detail are published approximately 40 days after the month to which they relate.

Estimates of retail inventories are made by OBE by extrapolating benchmark data contained in Census Bureau's annual survey of retail trade. The current data available to OBE for making the extrapolations are inadequate, however. The limitations of the estimates which result constitute one of the important gaps in our current economic indicators. The Intensive Review Committee to the Secretary of Commerce considered this gap sufficiently serious to include a plea for improvement in these data as one of the recommendations (No. 28) in its report to the Secretary.

The Bureau of the Census is using some of the spot-check funds voted in lieu of full censuses for fiscal year 1954, to undertake a survey to test the feasibility of collecting monthly inventories data from a random sample of retail trade establishments. Thus far the results of the survey have been encouraging. If funds are available with which to continue and expand this survey in fiscal year 1955 and beyond, there is ample reason to except that the Census Bureau will be able to produce reliable estimates of end-of-month inventories of retail trade establishments.

Department store statistics.—Two closely related series covering a part of retail trade warrants special mention because they are the oldest Federal series in retail trade and because they are given considerable publicity in the financial press, especially in local areas. They are the Federal Reserve Board's monthly indexes which are computed as a joint product of the Federal Reserve Board's Division of Research and Statistics and the research departments of the 12 Federal Reserve district banks. Data collected from department stores by the Federal Reserve banks and used in constructing the sales indexes are also used by Census in making estimates of retail sales under its monthly retail trade report program. Duplicate collection of these data by two Government agencies is thereby avoided.

Indexes for the 12 Federal Reserve bank districts and for some cities or areas within those districts, as well as for the Nation, are computed and published. Considerable use is made of the indexes at the local level, especially in the department-store field, for these indexes are useful as indicators of the relative sales and inventories positions of this important segment of retail trade. However, one should not attribute to the department-store indexes the characteristics of all retail trade. Comparison of month-to-month changes in department-store sales with month-to-month changes in total retail sales shows that while changes in

the two series have been almost always in the same direction, the magnitudes of the changes are substantially different for a majority of the months for which data are available.

Recommendations

Benchmark statistics.—The most important need in the area of benchmark statistics on the distributive trades inventories and sales is a full census covering 1954. The annual surveys have provided or will provide adequate interim data, but they are not adequate substitutes for full censuses for long periods of time. It is important for maintaining the quality of inventories and sales statistics, and all other statistics provided by the censuses, that full censuses be taken at frequent intervals as benchmarks against which to compare the results of the annual surveys. Until the Congress approves the request for funds with which to conduct new censuses, the census benchmark data will become increasingly out of date.

There is considerable need, too, especially for use in market analysis by private businesses and in estimating consumption expenditures for the national income accounts for benchmark estimates of sales of some commodities or commodity groups in addition to the estimates of total sales by establishments.

The annual surveys of the distributive trades should be maintained on at least their present scope to provide adequate semibenchmark data. The 1953 annual surveys were financed out of the "spot-check" funds granted in lieu of full censuses for fiscal year 1954. Additional appropriations will be required to continue these in subsequent years. The usefulness of the annual survey of the distributive trades would be increased substantially if the delay in their publication were reduced from the now characteristic 6 to 8 months following the close of the year to possibly 3 months.

A more accurate analysis of consumer credit would be made possible if a breakdown of retail sales by type of transaction, i. e., cash, charge account, and installment, were provided in the annual retail trade surveys.

Current statistics.—When the new census monthly wholesale trade report program becomes established, the basic weaknesses which now exist in our current wholesale trade inventories and sales statistics should have been eliminated. To be sure, various refinements in the statistics will still be necessary, and for at least the first year during which estimates are made using the new census sample unexpected flaws in the concepts, data-collection methods and estimating techniques used will become apparent and will have to be corrected. The conceptual problems in particular are peculiarly difficult in the area encompassed by wholesale trade. But it should be expected that the census wholesale trade program will be basically sound.

The most serious weaknesses in current retail sales statistics are in the 10-day preliminary estimates. The accuracy of these advance estimates needs to be improved.

The more detailed final estimates of monthly retail sales have been generally adequate. Technical problems associated with the introduction of a new sample of retail establishments in 1953 have affected the reliability of the estimates for some purposes, especially year-to-year comparisons, however. The effects of these technical problems on the estimates produced are being studied, and any changes in techniques suggested by the study which will improve the estimates can be expected to be adopted.

Improvement of retail trade end-of-month inventories statistics depends upon the continuation, expansion, and success of the program under which Census is now testing the feasibility of collecting monthly inventories data from retail trade establishments. If funds are available for the program and the program is successful, the most serious weakness in our current inventories and sales statistics would be largely eliminated. Undoubtedly, improvements in and refinements of any retail trade monthly inventories which are produced will be possible and desirable.

Monthly retail inventories and sales data by products for selected items, such as furniture and farm machinery, would be valuable tools of analysis in interpreting current economic trends. For some products, such as furniture and farm machinery, value data would suffice; for others, such as new and used cars and selected major appliances, physical quantity data would be desirable. Recent tests by the Census Bureau indicate that the collection of such data for independent stores is feasible. What has not yet been determined are the problems connected with obtaining similar information from department stores and large chain store organizations and with combining data from these three types of

stores into a meaningful whole. When the magnitude of those problems can be ascertained and the approximate cost of obtaining these data estimated with some degree of accuracy, the need for these kinds of data can be reappraised in the light of their cost.

PERSONAL SERVICE TRADES

Historical development and available series

The major kinds of business subsumed under personal service trades are: motion picture theaters, hotels and motels, laundries and dry cleaning establishments, automobile repair shops, radio and television repair shops, and barbers and beauty parlors. The discussion of benchmark statistics under wholesale and retail trade is equally applicable to the service trades; the census of business and Statistics of Income constitute the two sources of benchmark data. The only annual survey of service trades conducted covers 1953, and that had limited kind-of-business coverage.

Inventories and sales statistics on personal service trades are not collected more frequently than annually by the Federal Government, and there are no compehensive current private series coveing this area. While the quantity of inventories held by all business can be ignored without constituting a serious statisical gap, the absence of reliable sales (i. e., receipts) data covering this segment of the economy does represent an appreciable gap in our current statistics. Because of this gap the current estimates of personal consumption expenditures for services (i. e., the major part of the "other side" of the aggregate sales by personal services trades) for national income accounting are necessarily based upon inadequate data.

Recommendations

Improvements in the benchmark statistics on the services trades are, as in the case for wholesale and retail trade benchmark statistics, contingent primarily upon the taking of a full census of business and regular annual surveys of business. In addition, the speeding up of the tabulations of Federal income tax returns data would provide valuable supplementary benchmark statistics.

The gap in our current service trades statistics could be plugged at a relatively low cost by using the existing facilities of the Bureau of the Census monthly retail trade report program, i. e., by expanding the coverage of that program to include the personal service trades.

MANUFACTURING

Historical development

The discussion of the historical development of Statistics of Income benchmark statistics under Wholesale and Retail Trade is applicable also to statistics on manufacturers' inventories and sales.

Census of manufactures benchmark statistics go back as far as 1810, when a program of decennial censuses of manufactures was initiated. In the 1920's and 1930's biennial censuses of manufactures were taken, but since 1939 only one full census of manufactures has been taken, that covering 1947. Annual surveys, based upon a sample of manufacturing establishments, covering the years 1949–53 have provided adequate general-purpose inventories and sales statistics in less industry and product detail than would be available from a full census.

Inventories, sales (or shipments), or other data have been published by the Census Bureau for certain industries in its Facts for Industry series, which were initiated in 1902. These data are published monthly, quarterly or annually, according to the need of the particular survey. These data are used extensively by the industries on which the data are published and in compiling the Federal Reserve Board production index.

Since the early 1940's estimates of manufacturers' end-of-month inventories, monthly sales, new orders and unfilled orders which constitute our general-purpose current manufacturing inventories and sales statistics have been published by the Office of Business Economics.

Available series

Two sources of benchmark statistics on manufacturers' inventories and sales exist: Statistics of Income and the censuses of manufactures. These two sets of benchmark statistics do not contain directly comparable estimates, however, so they are not freely substitutable for one another. Each should be used in conjunction with data based upon similar reporting units, data which use related

concepts, etc. The most important reason for the differences between the two sets of benchmark statistics, especially in the estimates for specific industries, is the fact that the estimates are based upon data from different kinds of reporting units: the company (Statistics of Income) and the establishment (the census). For example, the census estimates for the petroleum-refining industry are based upon reports from establishments (i. e., plants) classified as being in the petroleum refining industry, whereas the Statistics of Income estimates for the petroleum refining industry are based upon reports from companies classified as being in the petroleum refining industry. The company reports include the activities of these companies' establishments not engaged in petroleum refining, as well as those establishments which are, and exclude the petroleum-refining establishments of those companies not classified in the petroleum refining industry. A second reason for the differences is that the concepts being measured by the two series are not always identical. For example, inventories may be valued differently for tax purposes than in the reports to the Census Bureau.

The Census Bureau's Facts for Industry series, based upon reports from establishments of those companies not classified in the petroleum refining industry. ders, but its industry coverage is not, especially on a monthly basis, sufficiently broad to provide a basis for estimates covering all manufacturing.

Estimates of manufacturers' end-of-month inventories, monthly sales, new orders, and unfilled orders are made by OBE. The monthly estimates are made by extrapolating benchmark estimates derived from Statistics of Income, Part 2 (Corporations), the extrapolations being based upon monthly reports from a panel of manufacturing companies. Estimates of inventories and sales are made for approximately 22 industry groups and for a few industries within some of those groups; estimates of new orders and unfilled orders are made for 8 industry groups. Estimates of inventories by stage of fabrication (i. e., raw materials, work in process, finished goods) are made for all manufacturing only.

Recommendations

The need for Statistics of Income tabulations at the earliest possible time after the close of a year is very important, because of the method used in estimating manufacturers' current inventories and sales, for improving the estimates of manufacturers' current inventories and sales for current months. This is another case which emphasizes the importance of developing a procedure for speeding up those tabulations even more than the recently revised procedures of Internal Revenue Service will permit.

A full census of manufactures is needed to provide more detailed and more accurate benchmark statistics on inventories and sales than are provided now by either the Annual Survey of Manufactures or the Statistics of Income tabulations. The annual survey is based upon a sample of manufacturing establishments and does not provide either the regional, industry or product detail which can be obtained in a full census. The Statistics of Income tabulations, being based upon company reports, are necessarily less refined in their industry classification than are the census tabulations based upon establishment reports. Being based upon tax returns, the Statistics of Income tabulations are not able to provide estimated sales (or shipments) of specific products or product groups.

Because of the differences between the Statistics of Income and census estimates referred to under available series, a reconciliation of these two sets of benchmark statistics would contribute substantially to the usefulness of the data. Reconciliation of the two estimates is a major undertaking which can best be done in conjunction with the taking and tabulating of the censuses but which probably can never be completely satisfactory. The Bureau of the Census had planned to aggregate some of its establishment data into company data in a special tabulation as part of the 1953 censuses, had those censuses been taken. In the absence of such an extensive reconciliation, the estimates from these two different sources should be used interchangeably, if at all, only with extreme caution and with full recognition of their limitations in such uses. This does not detract from the considerable usefulness of the two sets of estimates when each is used in conjunction with other data collected on a similar basis.

Improvements in both the accuracy and the coverage of the current estimates of manufacturers' inventories, sales, new orders and unfilled orders are needed, especially for the industry groups. In spite of the generally accurate estimates of inventories and sales for all manufacturing industries, frequent large revisions in the estimates for individual industry groups suggest the need for a larger, more representative sample used as the basis for the monthly extrapolations. This is the third area in which a new sample covering the manufacturing indus-

tries is needed, the other two being statistics on financial reports and new plant and equipment expenditures. As is suggested in the section on new plant and equipment expenditures, maximum consistency among these three related programs as they relate to manufacturing corporations can be expected only if they are tied together at the data-collection stage by being based upon the same sample of manufacturing corporations.

Expanding the sample used by OBE is a necessary condition to the improvement of the estimates of new orders, unfilled orders, and inventories at various stages of fabrication. The totals for all manufacturing industries inventories by stage of fabrication are fairly adequate, but no estimates are available for a smaller segment. Estimates for at least some major industry groups would provide valuable data for use in analyzing current economic conditions. There is a potential reporting problem here; the records of many manufacturers may not break down aggregate inventories into raw materials, work in process and finished goods, so reliable estimates for the same industry detail as is possible for aggregate inventories should not be expected for inventories by stage of fabrication. More detailed statistics on new orders and unfilled orders would be possible if reports were obtained from a larger sample.

Several limitations on the usefulness of the current statistics on manufacturers' inventories and sales produced by OBE can be traced to the fact that they are based upon reports covering the activities of entire companies rather than a smaller unit. The inventories and sales of all products produced by the reporting companies are assigned to industry into which the company is classified on the basis of its primary activity. The result is that the estimates for any industry cannot be considered a precise measure of the products which are customarily associated with that industry. In the case of the OBE series, the collection of product inventory and sales information from the reporting companies would provide a basis for remedying this shortcoming by implicitly narrowing the unit of classification from a company to a division or, possibly, a product group. This would, however, require more funds and would probably delay the publication of the estimates. It might also encounter substantial reporting resistance from the companies requested to provide the detailed data, in many cases for the very understandable reason that they might not maintain records which provide detailed product information. Clearly refining these statistics to produce precise product data could be both a difficult and a costly task.

Staff memorandum No. 4

ADEQUACY OF CONSTRUCTION AND HOUSING STATISTICS

By Paul F. Krueger

Historical development

In the early 1920's the Bureau of Labor Statistics started compiling data on the number of dwelling units for which building permits had been issued each month. The number of localities increased so that in the late 1930's a series was published representing all urban areas. The present series on new permanent nonfarm housing starts was started on a national basis in 1946. Permit data covering various types of building construction—nonresidential as well as residential—continue to be published as the only data for local areas.

For a few years beginning in the mid-1930's the Work Projects Administration compiled annual estimates of the dollar volume of new construction activity. Shortly after 1940 a number of other agencies—Bureau of Foreign and Domestic Commerce, Bureau of Labor Statistics, and War Production Board—had started issuing monthly estimates of construction activity. After the war the present arrangement was developed in which joint responsibility was placed in the Department of Commerce and the Bureau of Labor Statistics for a single series. Annual estimates of new construction activity by States and of expenditures for maintenance and repairs were discontinued after 1952.

The first complete decennial census of housing was taken by the Bureau of the Census in 1940. Surveys which were comparable in subject matter coverage had been conducted as work relief projects in two-hundred-odd localities in the 1930's.

Since the early 1920's the Interstate Commerce Commission has been compiling annual indexes of railroad and telephone and telegraph construction costs. The Bureau of Public Roads has maintained a quarterly index of highway construction costs since the early 1930's. A quarterly series on costs of building a

standard 6-room house in 85 cities, started by the Home Loan Bank Board in 1936, was discontinued in 1947. Since 1947 the Department of Commerce has computed a monthly composite cost index for all construction.

Available series

Housing starts.—Number of dwelling units started each month, national total, private, and public; and seasonally adjusted figure for private.

New construction activity.—Dollar volume of new construction activity each month classified by type of construction and public and private ownership; also a series seasonally adjusted and one in 1947–49 prices.

Contract awards for public construction.—Monthly series on contracts awarded for various types of Federal, State, and local public construction.

Construction costs.—Monthly composite cost index for all construction, quarterly index for highways, and annual for railroads and telephone and telegraph.

Recommendations

The recommendations discussed under the first two points below concern needed improvement of existing series of data. The others have to do with filling in gaps in currently existing information.

1. *Housing starts.*—The principal deficiencies in this series are that it does not cover houses built on farms and that too great reliance is placed on building permits without adequate investigation to determine the completeness of coverage of local permit systems. Correction of these deficiencies is needed to improve the reliability and usefulness of the series. Expansion of the series to include farm housing would reduce the importance of the distinction between farm and nonfarm dwellings; even though data were published on the two categories the accuracy of the total would not be affected by errors in classification. It would also help in the reconciliation of the differences between housing starts and changes in the housing inventory, a problem discussed under item 4.

2. *New construction activity.*—Estimates of the volume of new construction activity are unreliable because of the incompleteness of the source data on which they are based. While the extent of probable error cannot be estimated some idea of the outside limits may be drawn from the fact that as much as 20 or 25 percent of the total estimate may be based on judgment (informed guesses) and projections. Also, in order to utilize as much as possible information already available, an estimating technique has been developed which requires the translation of estimates of the amount of work started into the value of work put in place. The factors which are used in making this translation are inadequate and obsolete. These deficiencies are most serious in the case of private nonresidential and State and local public construction. Their correction requires more complete use of other secondary sources of data supplemented by field surveys where necessary to obtain information on certain types of construction jobs started and the rate of progress toward completion.

3. *Expenditures for maintenance, repair, modernization, etc.*—No reliable data are available on the volume of this segment of construction activity. Rough guesses of its volume have been of the magnitude which would place it at about one-third of the volume of new construction and it is generally believed to be increasing, particularly in residential properties. These estimates have been based in part on the disappearance of much larger amounts of certain types of building materials than are believed to be used in new construction. Exploratory work has been started on a small scale to develop survey techniques designed to obtain information on expenditures by homeowners for maintenance and repairs. Similar developmental work on other types of properties and full-scale data collections covering all types should be initiated as rapidly as possible, probably on a quarterly basis to begin with.

4. *Volume and characteristics of and changes in housing inventory.*—An integrated program is needed to provide information during the intercensal period on the amount and character of the housing supply, how it is used, and the changes which are taking place. More specifically, such a program should be developed in the light of the need for two basic types of information. The first type is direct measurement of changes in the housing supply due to factors such as demolitions and conversions. The only segment of change on which information is currently available is that of additions through new construction, and even here there is no information on size, quality, sale price or rent, and characteristics of the occupants of new dwellings being built. The importance of other

factors which affect both volume and character of the housing supply, in some respects more directly than does new construction, may be illustrated from existing information. Comparison of the 1940 and 1950 housing censuses shows an increase of 8,658,000 in the total number of dwelling units in the United States during the 10-year period and an increase of 9,942,000 in the number of nonfarm units. The housing starts series shows only that construction was started on 5,583,300 new permanent nonfarm units.

The second type of information concerns quantitative and qualitative measures of the housing inventory. It is not feasible to obtain complete information on the effects on the housing inventory of all current activity and changes as they take place. They are taking place so rapidly, however, that sample inventory surveys are needed in between decennial censuses so that we will have some knowledge of the status of the housing supply. The frequency with which such information should be obtained would vary from quarterly or semiannually in the case of vacancies in old and new houses to quinquennially for such items as tenure, condition, facilities, and number of rooms.

Certain phases of the program discussed under this point could be undertaken as soon as funds were made available. For example, vacancy surveys and an intercensal survey of the housing inventory. In view of the peculiarly local character of the housing situation such surveys should be designed in such a way as to provide national data but at the same time a sample of local areas which would show the composition of the national picture. Some other phases of the program, for example, surveys designed to measure conversions and demolitions, would require a certain amount of exploratory and developmental work before full-scale data collections could be launched. The two basic types of surveys would require integration; collection of more complete current information on charges as they occur would lessen the need for the inventory information, and vice versa.

5. *Backlog of construction jobs planned.*—Information on the volume of various types of construction jobs planned and being planned is needed as an economic intentions indicator. While information on planning of all kinds of construction, private and public, would provide a basis for general economic forecasting in the construction area, data on State and local public works alone would be useful in formulation of plans for public-works programs. Collection of data on construction planned in the industrial area should be integrated with that on expenditures for new plant and equipment.

6. *Construction costs.*—The composite construction cost index compiled by the Department of Commerce makes use of several privately published indexes for different types of construction which are generally recognized to be subject to serious shortcomings. In addition to the need in economic analysis for a reliable general construction cost index there is specific administrative need within Government for an index for public works types of construction.

7. *Other related data.*—There is no information on the size and character of builders' operations comparable to that provided on other business establishments through the censuses of manufactures, and the wholesale, retail, and service trades. Such information would be particularly useful in the case of residential builders. In addition to its use by builders themselves and by building materials manufacturers and dealers, such information would be useful in formulating and evaluating the effectiveness of Government policy in the housing field.

Data on materials required in construction have always been weak and incomplete and most data available on labor requirements are obsolete. In addition to needs for current economic analysis, such data are needed in conjunction with work on mobilization preparedness and public-works planning programs. (Information on materials required for various types of construction were totally inadequate for administration of production controls during the war and the Korean emergency.) These data should be reviewed periodically and brought up-to-date systematically by a program through which all types of construction would be covered on a cycle basis. The program in this area should be integrated with those having to do interindustry relations studies, manpower requirements, and productivity.

The present building materials production index is unreliable because some important materials are not included and the weights are obsolete. Provision should be made to correct these deficiencies as part of the program of current data collection in the entire area of industrial production.

Staff Memorandum No. 5

FOREIGN TRADE AND SHIPPING STATISTICS

By J. P. Cavin

FOREIGN TRADE STATISTICS

Historical development

The Federal Government has compiled annual statistics on United States foreign trade since 1790, and monthly statistics since 1866. Until 1903, the Department of the Treasury had full responsibility for these statistics. In that year, responsibility for publication and analysis was transferred to the newly established Department of Commerce and Labor, with responsibility for collection and tabulation remaining with the Treasury. In 1923, the responsibility for compilation was transferred to the Bureau of Foreign and Domestic Commerce in the Department of Commerce. Since 1941, this function, as well as that of publication, has been carried on by the Bureau of the Census in the Commerce Department. However, the responsibility for interpretation and analysis of foreign trade statistics remained in the Bureau of Foreign and Domestic Commerce.

Around 1929, the Federal Government was producing a generally adequate body of international trade statistics. There was a sharp curtailment in the program in 1933, but a noticeable expansion in the amount of commodity detail available occurred after the inauguration of the Reciprocal Trade Agreements program in 1934 and a very marked expansion in commodity detail took place during World War II. At present, statistics are compiled on about 5,000 import commodity classifications and about 2,900 export classifications. The comparable figures in 1929 were approximately 3,500 and 1,500 respectively. In other respects, however, our foreign trade statistics are still below the standards attained in 1929. This is particularly true with respect to the compilation and publication of series that reveal the economic significance of the changes that have been taking place in the direction and composition of our trade with other countries.

It is fair to say that the statistics of United States foreign trade are generally on a level with those of the other large trading nations, but are by no means generally superior. We are definitely among the leading countries in the amount of commodity detail compiled and rank high with respect to coverage and accuracy. However, with respect to the provision of current and historical summary data revealing the economic significance of changes in our foreign commerce, we have tended to lag, especially in recent years. Canada, for example, provides many special types of important summary information, such as comparable year-to-year figures and annual aggregates of trade according to the degree of manufacture, industrial origin, and purpose.

Available series

The Census Bureau publishes very complete series of merchandise exports and imports, the nature of which is best indicated by reference to some of the Bureau's regularly published reports.

For imports there are two basic monthly reports. The first (FT110), shows the value and quantity of individual commodities imported for consumption, arranged by countries of origin. The second (FT120), shows the value of such imports by country of origin, arranged by approximately 100 commodity subgroups.

For exports, there are also two monthly reports. The first (FT410), shows value and quantity of domestic and foreign merchandise by individual commodities, arranged by countries of destination. The second (FT420), shows the value of these exports to foreign countries, arranged by commodity subgroups.

These basic commodity and country reports are supplemented by summary reports, such as the monthly report on total trade (FT900); special reports such as the monthly release (FT800) on trade in merchandise and gold and silver with United States territories and possessions, and the monthly report (Statement 2402) covering gold and silver movements. A number of reports containing information not shown in the regularly published reports are specially prepared for subscribers on a cost basis.

In addition to the monthly reports, the Quarterly Summary of Foreign Commerce provides cumulative totals for some of the categories in the monthly

reports, plus certain special tabulations, such as foreign trade moving by air.

A brief description of merchandise exports and imports is included in Historical and Descriptive Supplement to Economic Indicators, 1953, pages 40–41; and a comprehensive discussion of the scope and content of foreign trade statistics is available in Foreign Commerce and Navigation of the United States, last published in 1946.

Recommendations

In its recent report, the Intensive Review Committee to the Secretary of Commerce found continued attrition and erosion in the foreign-trade-statistics program during the past 8 years. This situation is not due to lack of good basic data, but to the lack of resources needed to compile and publish these data in ways and at times that will minimize their usefulness for business and economic analysis. The principal recommendation of the Intensive Review Committee—"that adequate funds be requested to permit the Bureau to build up its functions in the assembling and publication of foreign trade statistics—including larger print—and comprehensiveness appropriate to the needs of the world's chief trading nations"—is one that merits reiteration.

The steps recommended by the Bureau of the Census in the field of foreign trade, in the letter also attached to this report, would all contribute to the achievement of the foregoing objective. These include (1) preparation of comparable commodity statistics on an annual basis since World War II; (2) preparation of comparable commodity statistics on exports, imports, and domestic production; (3) resumption of publication of total exports and imports on a seasonally adjusted basis; (4) improvement in the index numbers of quantity and value of foreign trade prepared by the Bureau of Foreign Commerce; (5) resumption of more complete compilation of low-value exports and imports; (6) preparation of supplementary foreign trade statistics in conformity with United Nations recommendations concerning uniform definitions of value, country and the like; and (7) resumption of publication of the annual Foreign Commerce and Navigation of the United States and of the Monthly Summary of Foreign Commerce. The following comments are in the nature of amplification of these recommendations.

The first four recommendations are in the direction of converting the great mass of basic data on exports and imports into series which will provide better analytic tools for revaluating the economic significance of current and longer run movements in the level and composition of our foreign trade.

The recommendation for resumption of fuller compilation of low valued shipments, reflects a demand for the fullest possible detail on commodities and corresponding countries of origin and destination by private users who require a level of detail appropriate to their own business operations, and by Government agencies which are required to take administrative action with respect to very specialized commodities or commodity groups.

The recommendation concerning statistical compilations conforming with United Nations recommendations merits most serious consideration. Progress in the international comparability of external trade statistics is of mutual benefit to all free-world nations, and is of direct benefit to the United States which makes very extensive use of the trade statistics of other countries. It is the policy of this Government to comply with recommendations in this field as far as practicable.

The proposed resumption of publication of the annual Foreign Commerce and Navigation of the United States and of the Monthly Summary of Foreign Commerce were specific recommendations of the Intensive Review Committee. It should be emphasized that Foreign Commerce and Navigation has been the permanent and final record of United States foreign trade, published continuously from 1821 to 1946. In addition to recommending resumption of publication, the committee also recommended that "editions for the missing years since 1946 should be published eventually in condensed form adequate to maintain the continuity of the more important series."

SHIPPING STATISTICS

Historical development

Shipping statistics include information about ships themselves, such as tonnage and type; data concerning the movement of vessels and their cargoes in and out of ports, on ocean trade routes, and on inland and coastal waterways; data con-

cerning the use of ships, such as commodities and passengers carried and costs of operation; and data measuring the utilization of harbors, channels, and land-based structures.

Various types of shipping statistics have been collected by the Federal Government since about 1790. Until recently, however, the statistics in this field were characterized by duplication, lack of comparability, and lack of clear demarcation between the collection of data on waterborne foreign commerce to provide foreign-trade statistics and to provide a portion of the shipping statistics.

Prior to World War II, three agencies—the Bureau of the Census, the Corps of Engineers, and the Maritime Commission (now the Maritime Administration—were collecting and publishing data on waterborne foreign commerce, each obtaining information from different sources, and employing different commodity classifications, different port definitions and different concepts of coverage. The Maritime Commission and the Corps of Engineers collected and published information on the deep sea, domestic and lakewise commerce of the United States; while the Corps of Engineers was the sole source of information on inland waterborne commerce.

In 1941, the Division of Statistical Standards of the Bureau of the Budget obtained agreement among the agencies on preliminary steps to improve the situation, but it was not until after World War II that it was possible to take effective action to standardize shipping commodity classifications, port definitions and concepts of coverage, and to eliminate duplication of activities. In 1946, the Census Bureau began supplying the Maritime Commission with commodity detail on foreign waterborne commerce obtained from the import entry forms and shippers' export declarations filed with the Customs Bureau. These documents are also the original source of foreign-trade statistics.

Under the basic pattern that has been established, Census is responsible for all commodity detail on foreign movement. The Corps of Engineers is responsible for commodity information on domestic waterborne movements, and for other information concerning the usage of waterways and ports. The Maritime Administration remains primarily responsible for data concerning statistics on vessel utilization, information by type of operator, and information arranged by ocean trade routes. In addition to being the primary source of the shipping statistics compiled by the Census Bureau, the Bureau of Customs provides certain annual statistics on the merchant fleet of the United States arising out of it duties with respect to the registration and licensing of vessels.

Available series

Using the same basic Customs Bureau sources as for foreign-trade statistics, the Census Bureau publishes a monthly summary report (PT985) showing shipping weight and values of exports and imports on dry-cargo and tanker vessels, arranged by customs districts and ports of lading (exports) or unlading (imports). Also shown is shipping weight of exports and imports in such vessels, arranged by trade areas and amounts carried by United States-flag vessels. Additional data showing trade between foreign trade areas and United States coastal districts for dry-cargo vessels in liner and irregular service are provided in the monthly report (FT1000), which is available to subscribers on a cost basis.

The Maritime Administration regularly publishes reports on the merchant fleets of the world by country, tonnage, and type of vessel; deliveries of new merchant vessels by countries for which built and in which built; the employment of United States-flag merchant vessels by type in United States foreign trade, United States domestic trade, and foreign-to-foreign trade; new-ship construction and reconditioning; shipyard employment; seafaring employment and wages. Also collected, but not regularly published are data on ship utilization, with special reference to port-to-port movements of cargo (in terms of shipping weight) and of passengers.

The Corps of Engineers publishes annual data showing the total tonnage of waterborne commerce, the principal commodities, and the trips and drafts of vessels in and out of coastal ports, Great Lakes ports, and on rivers, harbors and connecting channels. Summaries and detailed figures are published in Commercial Statistics, Part 2 of the annual report of the Chief of Engineers. This agency also publishes annual reports containing information on transportation lines and their vessels operating on the Atlantic, Gulf, and Pacific coasts, the Mississippi River system, and the Great Lakes. This information includes vessel characteristics and data on the operation of the lines, such as points served, schedule of operations, and types of commodities carried.

Recommendations

As in the case of foreign trade statistics, the most pressing need in the field of shipping statistics is not for the collection of more data, but for more complete and timely dissemination of the statics that have been gathered. There is a definite demand for improvements in this respect, not only from within the Government, but from the shipping industry, port authorities and others interested in this phase of transportation.

With respect to agencies, there is need for an annual report by the Maritime Administration consolidating their own data with commodity detail provided by the Census Bureau having particular reference to the value and volume of waterborne commerce by trade routes, between ports, by flag of carrier and the like. It is anticipated that this publication program can be inaugurated within this calendar year. Much of the basic Census Bureau data are available only at designated field offices on machine tabulation sheets, in coded form, and a monthly and annual publication program is needed to make this fund of data more generally available and usable. However, additional resources are needed to fill this gap. The Corps of Engineers can carry on an adequate program of collection, compilation, and publication at the level of the budget request submitted for fiscal 1955.

Staff memorandum No. 6

BALANCE OF INTERNATIONAL PAYMENTS

By Edward T. Crowder

Historical development

Building on the earlier work of private researchers, the Department of Commerce began its annual series of estimates of the balance of international payments in 1922. By 1929 the sources available for these estimates were still, by present standards, relatively meager and the estimates correspondingly subject to error. Over the years the balance of payments staff has improved the estimates by developing new and better basic sources of data through questionnaires specifically adapted to them, and by making various special studies. It has also had access to new materials becoming available elsewhere, including a Department of the Treasury program of statistics reflecting international capital movements developed during the 1930's, Treasury censuses of American-owned assets abroad and of foreign-owned assets in the United States in the 1940's; and a program of central reporting of United States Government foreign transactions developed by the Clearing Office for Foreign Transactions in the 1940's. The balance of payments estimates have also improved in promptness, frequency, and geographical detail. At first regularly prepared only annually and covering transactions with the rest of the world as a whole, they have since 1946 appeared quarterly and since 1948 with a breakdown for various areas of the world.

Available series

The balance of international payments presents a summary of the economic transactions between the residents of the United States and those of the rest of the world, including purchases and sales of goods and services; financial transactions; and gifts or other one-sided transfers. The major categories into which these transactions are classified are exports of goods and services; imports of goods and service; unilateral transfers; United States capital movements; foreign capital movements; and gold transactions. The export and import transactions are further classified as merchandise, transportation, travel, miscellaneous services (Government and private) and income on investments (Government and private). A net balance is struck for the imports and exports of goods and services. Unilateral transfers and capital movements categories are further classified into appropriate subcategories—for example, United States private direct investments, other United States private long-term investments, etc. A residual item labeled "errors and omissions" measures the extent to which the various plus and minus claims arising from these transactions fail to cancel out.

This analysis is presented by quarters for transactions with the world as a whole and separately for several areas (Western Europe, dependencies, Eastern Europe, Canada, Latin American Republics, all other countries, and international institutions, with additional detail on the sterling area). (In the area statements an additional measure of imbalance, due to transfers of funds between foreign areas, is combined with "errors and omissions.") These statements

appear quarterly in the Office of Business Economics' Survey of Current Business.

Closely related to the balance of payments statistics are those showing the international debtor-creditor position of the United States. Annual summaries are prepared by the balance of payments staff showing our intenational investment position in some detail by type of claim, vis-a-vis the rest of the world as a whole and various areas. United States investments abroad are classified as private and governmental, each subdivided into long-term and short-term, and with still further detail for private investments. Foreign assets and investments in the United States are shown with an appropriate, but somewhat different, breakdown. A balance is struck to show the net debtor or creditor position of the United States. These, as well as related estimates in the balance of payments, are made partly on the basis of a recent benchmark in the form of a census of United States direct investments abroad in 1950, covering holdings, income, and capital movement.

Other related bodies of data deserve mention. The balance of payments staff, continuing the work of the Clearing Office for Foreign Transactions on foreign aid by the United States Government, prepares quarterly statistics covering such aid in the form of grants and credits by program and by country. Also various special articles dealing with particular phases of the balance of payments or related statistics appear from time to time.

Recommendations

The balance of payments is a composite of a number of separate estimates covering a range of economic activity. These estimates vary in accuracy, and the possibilities for further refinement are naturally numerous. The "errors and omissions" figure in a reminder of the shortcomings of the statistics, but it is a net figure and its magnitude is not necessarily correlated with the general quality of the data. In general, however, the estimates currently appear to serve adequately the general analytical uses to which they are put, although there is a need for finer geographic breakdown than has been available.

Work is continually going forward to improve the estimates. At the same time the balance of payments staff reports a current danger of deterioration reflecting greater difficulty in obtaining source material, stemming partly from reduced resources for statistical work and from the problem of public cooperation in supplying data. This must be resisted.

Various individual tasks deserve attention. Study should be given to the possibility of improving the quality of current data on international commercial credits and liabilities. A new benchmark survey of foreign direct investments in the United States is in order. Data are needed on various types of transactions, including foreign investment in United States commodity exchanges, real estate transactions, maritime insurance transactions, and receipts of royalties. In the face of the discontinued listing of passenger addresses on manifests by airlines and some shipping companies, a substitute source of names of international travelers must be found. This is necessary to avoid impairment of the travel expenditure estimates and will permit strengthening of the sample to provide individual country estimates. Merchandise trade data require investigation and possibly refinement with respect to timing and valuation, and also are needed more promptly.

Staff memorandum No. 7

FEDERAL RESERVE INDEX OF INDUSTRIAL PRODUCTION

By Y. S. Leong

Historical development

The Monthly Federal Reserve Index of Industrial Production was first published in 1927 by the Federal Reserve Board (later Board of Governors of the Federal Reserve System). It included 8 physical quantity series on mineral production which composed the Index of Mineral Production, and 52 physical quantity series on manufacturing production which formed the Index of Manufactures. The base period of the index was 1923–25. The level of the Index of Manufactures was corrected every 2 years by a biennial index of manufactures computed from production data selected from the biennial Census of Manufactures.

In 1940 the Board published a complete revision of this index, which in 1943 underwent a further revision to reflect wartime changes. As of 1943 the index was composed of 100 component series, of which 9 were for minerals and the other 90-odd for manufactures. The composition of the index was much improved, with new components added and many of the old revised. The base period was shifted from 1923–25 to 1935–39. Because the Census of Manufactures, hitherto taken biennially, was suspended after that of 1939, the biennial index of manufactures computed from census data and used to correct the Board's index for levels was no longer available. The index after 1939 was therefore on its own.

The new revision

In December 1953 the Board published its latest major revision of the index. Like the earlier versions, the index is designed to measure the changes of the physical volume or quantity output of mining and manufacturing industries as a whole, and of the mining and manufacturing segments separately.

Unlike the earlier versions which included only monthly series as components, the present index utilizes both annual and monthly data. Annual data which are more reliable and available in greater detail than the monthly data are used to compute an annual index and a set of annual group, subgroup and industry indexes to measure the year-to-year output changes. Monthly data are utilized to construct a monthly index and monthly subindexes similar to the annual measurements. The use of comprehensive annual indexes to determine levels of the monthly indexes makes it possible to employ fewer but more select component series to represent each industry in the monthly indexes and to utilize man-hour series as components with more confidence.

The annual Index of Mineral Production is composed of about 70 separate physical quantity series, representing the output of all important minerals, and the monthly index of 10 physical quantity and 1 man-hour series adjusted for levels, to which only a small proportion of the weights was assigned.

The annual index of manufactures included about 1,370 series and the monthly 164 series, which are classified into major groups for manufacturing of the standard industrial classification. Physical quantity series account for three-fourths of the weights assigned in the annual index and about one-half of the weights in the monthly index. The remaining components in the annual index are deflated value figures, estimates based on several types of data, or adjusted man-hour data, with the last accounting for 4 percent of the weights. The remaining components of the monthly index are largely man-hour data adjusted for changes in labor productivity to represent output. The proportion of man-hour data in the monthly index is indeed large, but it should be remembered that only the current changes are governed by these man-hour series, and that index levels for industries concerned are determined largely by annual data on quantity of products manufactured.

The weights used are based on value added in individual mining and manufacturing industries in 1947. The value-added data for mining are estimated and those for manufacturing are from the census of manufactures for 1947. With data now available to represent all manufacturing industries, the imputation of weights to given series to represent the productive activities in industries not represented by any component series, as used in computing earlier versions of the index, was discontinued.

The base of the new index has been shifted from 1935–39 to 1947–49.

As the data would permit the computation of the new index and its group indexes for the period since January 1947 only, it is necessary to link the new index and its group indexes to the respective old indexes which extend back to January 1919. Before this is done, however, the index and its group indexes for the period 1939 to 1947 will be revised, using the benchmark index of manufactures and its component indexes (computed by the Board of Governors of the Federal Reserve System and the Bureau of the Census from data of the 1939 and 1947 censuses of manufactures) to determine the 1939 levels of industry indexes relative to 1947.

The major advances in the new index as compared with the earlier versions are——

(1) Increase in the number of component monthly series from 100 to 175 and many improvements in the old series retained as components in the new index.

(2) Use of comprehensive and detailed annual index and group indexes, based on 1,440 series to check and adjust the annual levels of the monthly indexes for individual groups and industries.

(3) Use of component series to represent certain industries formerly represented only indirectly by imputation of weights to other industries.

(4) Use of 1947 value-added data for weighting both the mineral and manufacturing series in place of the previously used 1937 value of the product data for weighting the mineral series and the 1937 value-added data for the manufacturing series.

(5) Shifting the base from 1935–39 to the more recent period 1947–49.

(6) Adherence to the latest SIC code as the basis for organizing the index and its component measurements.

Using the best methods and techniques to construct the index numbers of production and utilizing all the best available annual and monthly series as components, the new Federal Reserve index of industrial production, and the subindexes of minerals, manufactures, major groups, and individual industries, are the best physical quantity measurements of production that can be devised at this time. Further substantial improvements can be made only when more and better data on production become available.

As the Board depends entirely on other Government agencies, on trade associations, and trade journals for data used in constructing its indexes, its role in the improvement of production statistics is more or less a passive one. It can recommend that other Federal agencies and private organizations improve their data.

Recommendations

The Board may recommend that the Bureau of the Census collect more monthly data on manufactured products to replace certain of the series on input of materials or labor now used in the index to represent the output of products and to serve as components in industries which are only skimpily represented by makeshift series. Specifically, if current data on the output of certain important products were available, for example, on flat glass, brass mill products, woven synthetic fabrics, and soap and other detergents, the index could be further strengthened. The Census Bureau may also be urged to collect more and better annual series on products to compute better annual industry and other detailed indexes with which to adjust the levels of the monthly indexes constructed from data on man-hours or the consumption of materials, and to replace certain of the deflated-value or other estimated annual series.

For some industries, which produce complex and heterogeneous products, such as many types of machinery manufacturing, where it is impractical to collect current physical-unit data on products, man-hour series will continue to be relied upon to represent production in the index. Here especially it is desirable, if possible, that annual detailed physical-volume data be available for adjusting the man-hour series.

The use of man-hour data to represent current changes in production and of annual physical quantity data to determine the levels requires that the basis for industrially classifying the input of labor to be the same as or as close as possible to that used in classifying the output of products. However, the collection and presentation of industrially classified data on man-hours and product output involve numerous problems of comparability. Many establishments produce more than one commodity or product, and these combinations do not necessarily follow industry lines. The output of the establishment may therefore be properly classified in more than one industry. On the other hand, the unit of reporting for man-hour data is the establishment, and the man-hour data relate to the operation of the entire establishment whether it be a single-product or multiproduct unit. Complete agreement on classification between those agencies collecting man-hour data and those agencies collecting product data is difficult to attain. In some cases it may be desirable to revise the SIC so as to permit a more definitive classification of the products and the related man-hours in the proper industries. In others it may be necessary to enlist the cooperation of multiproduct establishments in reporting man-hour data by major classes of products rather than for the entire establishment.

The Board may appropriately recommend that a census of manufactures be taken every 5 years to supply the detailed product data with which to extend the benchmark index of manufactures (already available for all census years from 1899 to 1947) from 1947 forward, and which will, in turn, be used to correct the levels of the annual and monthly indexes between census years. Such a census and also a census of mineral industries will be needed, too, to furnish the necessary data on value added for the determination of weight factors for the next major revision of the index.

Staff memorandum No. 8

ADEQUACY OF STATISTICS ON PRODUCTION OF MINERALS

By Y. S. Leong

Historical development

The Bureau of Mines of the Department of the Interior has been the main source of statistical information on minerals. Since 1925 this agency has been gathering and publishing annual statistics for all minerals of commercial importance, and more frequent information for a smaller number of the more important minerals.

The other Federal agency in the collection of statistics on minerals is the Bureau of the Census of the Department of Commerce, which has collected such information for almost a century and a half in connection with each decennial census. This agency collects benchmark statistics in this area which, except for production data, differ from those of the Bureau of Mines, which confines its collection activities largely to mineral commodity statistics, that is, in the production, stocks, and consumption of each mineral or mineral product. The last census of mineral industries was for the year 1939.

There are a number of private agencies collecting current statistics on minerals. For example, the American Iron and Steel Institute collects data on iron and steel; the Copper Institute on copper; the American Bureau of Metal Statistics on lead, gold, and silver; the American Zinc Institute on zinc; and the American Petroleum Institute on petroleum. It should be noted that in the collection of such statistics there is a division of labor between Federal Government agencies and private organizations. Where private groups have been collecting and publishing adequate information, Federal agencies have refrained from duplicating. The private statistical series may, therefore, be regarded as a part of the Federal statistical system on minerals, since but for their existence, the Federal Government would have been collecting similar series.

Although statistical information is available on many aspects of minerals, we shall restrict our discussion here to those aspects which are important for current economic analysis: namely, to the available series on the production, stocks, and consumption of minerals and mineral products.

1. Metals

Production.—By the 1930's the Bureau of Mines had been collecting and publishing annual statistics on the production of all metals of commercial importance. For some metals, data are obtained for 3 stages of production—mine, smelter, and refinery, or the equivalent; for other metals 2; and for still others, only 1. Where a significant part of the output is derived from scrap, as in the case of some of the nonferrous metals such as aluminum, copper, lead, and zinc, annual data on secondary production have also been obtained. These statistics represent practically complete coverage.

It was not until the latter part of 1937, however, that the Bureau of Mines first began to collect current information on metals. At this juncture, the Bureau, in response to the need for current data on strategic and critical minerals by defense agencies, inaugurated the collection of monthly statistics on a number of metals important for rearmament, and by the early part of 1942 gathered monthly information on the output of all metals essential for defense except those on which reliable data were already available from other sources. These monthly series were continued until the end of World War II when the frequency of some of the less important ones was reduced to quarterly. Beginning in the early part of 1951, with the shortage of metals becoming more acute, the frequency for most of the series again became monthly. However, with the passing of the defense emergency, the frequency of some of the series, beginning in the latter part of 1953, reverted to quarterly.

Stocks.—Until World War II the collection of statistics on stocks of metals held by producers and consumers was practically neglected by Government agencies. Up to that time the only data compiled regularly by the Bureau of Mines were those showing the producers' stock of iron ore, refined copper, and slab zinc and consumers' stocks of tin held at the beginning and at the end of the year. Beginning and ending inventory figures for each year on ferrous scrap and some of the nonferrous scrap at consumers' plants were also available. However, monthly figures on stocks of copper, lead, and zinc held by producers at the beginning and end of the month were compiled by private

agencies. Beginning in 1939 the Bureau of Mines began to collect current inventory data, and by 1942 figures on producers' and consumers' stocks of all important metals except those on which accurate statistics were already available from other sources were obtained currently on practically complete coverage. These figures have been continued to the present with some modifications in frequency and coverage to meet the statistical needs after World War II, during the Korean emergency, and since that emergency.

Consumption.—Before 1939, statistical series on the consumption of metal were practically nonexistent, but between the latter part of 1939 and the early part of 1942 the Bureau of Mines began a series of current canvasses on strategic and critical metals in the several production processes from the consumption of ore or scrap by smelters and refineries to the consumption of metals by manufactures classified by industry or by products made. These consumption statistics, representing a coverage of over 90 percent of each metal consumed, have been continued to the present, with a reduction in frequency for some metals from monthly to quarterly.

2. Mineral fuels

Production.—Current statistical series on the production of mineral fuels which include bituminous coal, anthracite, coke and coke-oven byproducts, crude petroleum, natural gasoline, and refined petroleum products (gasoline, kerosene, fuel oils, etc.) are available back to World War I. These series which represent practically complete coverage of the output of each of the fuels from the beginning have been continued to the present by the Bureau of Mines. Improvements have been made from time to time to meet the needs for better or more adequate information on the production of mineral fuels. For example, as aviation gasoline became important, a monthly canvass of the production of this fuel by octane ratings was instituted; and as liquefied petroleum gas (LPG) began to grow in importance as a household fuel and as a raw material for the chemical and rubber industries, a monthly survey of the output of this product was added.

Stocks.—Monthly statistics on stocks of bituminous coal and anthracite held by industrial consumers, retail dealers, and at lake docks, representing practically complete coverage of coal inventory held by consumers, are compiled by the Bureau of Mines. These series, which are available back to 1918, have remained substantially unchanged since their beginning. Monthly figures on stocks of coke at all producers' plants have been collected by the Bureau of Mines since 1928. The Bureau has also been collecting and publishing monthly statistics on stocks of crude petroleum and petroleum products held by producers. These series date back to 1917. Most of these series were improved in the 1930's with the result that since then all of the series may be regarded as reliable and complete. A welcome addition to the information of stocks of liquid fuels is the monthly survey of the stocks of petroleum products held at bulk plants and jobber distributing terminals, recently started by the Bureau of the Census to fill an important gap.

Consumption.—Monthly series on the consumption of bituminous coal and anthracite, by industries, and by commercial establishments and households as indicated by retail dealer deliveries, have been compiled by the Bureau of Mines since 1918. The figures on bituminous coal account for the total consumption of this fuel, while those on anthracite represent only a major part of the consumption—the electric power utilities, the railroads and deliveries by the retail coal dealers. No significant revision of these series has been made since their beginning. The only monthly series on the consumption of petroleum which the Bureau of Mines collects is that of "crude run to still," which represents the consumption of crude petroleum by the refineries. However, the Bureau computes monthly demand figures for each of the major refined petroleum products by adding to producers' stocks at the beginning of the month, the production and imports during the month, and subtracting them from the exports during the month and producers' stocks at the end of the month. These demand or apparent consumption data have been continued from their beginning in the 1920's to the present. Mention should be made of the Bureau of Mines monthly forecasts of demand for motor fuel and crude oil which began in 1930 and which have played an important part in guiding Federal and State officials and oil producers in stabilizing the production of crude petroleum and petroleum products.

3. Other nonmetals

Production.—Since 1916, annual statistics on the production of nonmetallic minerals and mineral products (other than fuels) which include construction materials (stones, clays, sand, and gravel, cement, lime, and gypsum), fertilizer

materials (phosphate rocks and potash) and mineral chemicals (sulfur, barite, salt, magnesium compounds) as collected and published by the Bureau of Mines, have been on a comparable basis, representing practically complete coverage of each of the products. The Bureau has also been gathering current figures on the output of some of the more important products—cement, sulfur, fluorspar, gypsum, and phosphate rocks.

Stocks.—Because producers and consumers of nonmetallic materials usually keep small and more or less constant inventories, the collection of statistics on stocks of these products has been largely neglected. However, the Bureau of Mines has been compiling monthly figures on stocks of some of the more important products, of which there might at times be a sizable inventory on hand at producers' plants. Such data as of the end of the month are available on a comparable basis at least back to 1940 for the cement, fluorspar, phosphate rocks, and sulfur.

Consumption.—Statistics on the actual consumption of nonmetals are practically nonexistent. The only current series available are those on fluorspar and gypsum classified by end uses. For some of the other more important products—for example, clay, lime, phosphate rocks, potash, salt, sand and gravel, stone and talc—the Bureau compiles annual series on the quantities consumed by uses.

The status of the annual data on the nonmetals has remained unchanged since about 1916 while that of the current series since about 1940.

Recommendations

From the foregoing brief survey of the development of mineral commodity statistics during the past 3 decades it has been observed that there were 2 major periods of growth. The first occurred during World War I when the war agencies inaugurated a collection of current statistics on the production, inventory, and consumption of mineral fuels. These series have been carried forward to the present by the Bureau of Mines. The second took place during World War II when the Bureau of Mines, in response to the request of war agencies for information for defense mobilization and subsequently for administration of the war programs, began a collection of current statistics on the production, stocks, and consumption of all metals and metal products essential for war. With some reduction in frequency and details after the war, these series experienced a rejuvenescence during the Korean emergency, and in the latter part of 1953 they returned to their peacetime status of a cutback in details and frequency.

The current statistics on mineral fuels, and those on metals despite their peacetime curtailments, when supplemented by other current series contributed by private agencies, are probably adequate to meet our minimum needs for information for current economic analysis during peacetime and perhaps to serve as a statistical basis for mobilization planning during the coming days of a cold peace. However, the data on the consumption of metals by end uses still leave something to be desired. These statistics are collected from manufacturers who are requested to report their consumption of various metals in the fabrication of various end products. Many of the multiproduct plants who report do not keep accurate records on the use of each metal in the byproducts they manufacture. The returns from these respondents, therefore, show at best, estimates, and in some cases leave the questions on uses unanswered. In view of the expenses involved in keeping such records, for which the manufacturers themselves do not have any need, it is doubtful whether those respondents in peacetime could or should be required to report from actual records of consumption. These shortcomings, then, are perhaps largely inherent, impossible of immediate correction. Admitting that some of the figures on consumption are guesses on the part of the respondents, the Bureau of Mines nevertheless believes that the data are sufficiently accurate to be used for current economic analysis, pointing out that during World War II and the Korean emergency the defense and war agencies used these statistics to formulate allocation policies and to aid them in allocating scarce materials to industries.

Although mineral commodity statistics are adequate for peacetime economic analysis, there is still need for benchmark data on mineral statistics which are largely not available from the Bureau of Mines—data on the quantity and value of mineral production by industries; on number of enterprises, mines, quarries, or wells; on labor (number engaged, wages paid); on contract work; on materials, supplies, and fuels used; on expenditures for development work, etc.—which had been provided by the Bureau of the Census every 10 years. The last census of mineral industries was for the year 1939. Even though the present law authorizes quinquennial censuses of mineral industries beginning in 1948, no

funds were appropriated by Congress for the taking of such a census scheduled for 1948 or 1953. There is already a lapse of 15 years—much too long an interval to be without this significant information on such a vital segment of the American economy.

Another serious gap in mineral statistics is the lack of reliable data on mineral reserves.[11] For the making of sound mineral policies by Federal and State Governments such data are indispensable.[12] Unfortunately such data cannot be obtained by merely sending a questionnaire to the owners of mineral properties. Mineral reserves must be estimated, and the estimates, if they are to have validity, must be based on a set of uniform definitions, concepts, and assumptions which are difficult to formulate and to agree. But the main obstacle to the gathering of trustworthy data on reserves is the reluctance on the part of mining companies and other owners of mineral lands to disclose the information on the true extent of their holdings. Some means must be found to induce the mineral industries to cooperate with the Government in making the estimates. Essentially mineral property owners must be assured that the information on the extent of individual holdings will not be revealed, and that such data will not be used for other than technical and economic analysis by the Federal Government.

Still another gap in mineral statistics, which should be filled, is the absence of data on costs and rates of exploration and development showing the prospects for our important minerals. Here, too, if we are to have any success, it will be necessary to secure the goodwill and cooperation of the mining companies.

Staff memorandum No. 9

MEASURING PRODUCTION OF AGRICULTURAL AND FOREST PRODUCTS

By Harold T. Lingard

Historical development

Statistical series that measure agricultural production have a long history. The Department of Agriculture, which has major responsibility in this field, has been collecting and publishing some information ever since it was established. The Bureau of the Census of the Department of Commerce, which supplies valuable benchmark data, has been conducting censuses of agriculture decennially since 1840 and quinquennially since 1925. For some time many State governments also have collected information on agricultural production, although by the early 1930's this work largely had been coordinated with that of the Federal Government on a cooperative basis. Some States also have been providing very useful information by way of annual farm censuses.

The many changes that have taken place over the years have resulted in providing information on more products, expanding the information available on some commodities, making the information available at more frequent intervals, and improving collection and estimating procedures. Some of these changes grew out of the needs of the two world wars for better information on supplies, and of production control programs in the 1930's for more and better acreage data. In recent years Research and Marketing Act funds have been a stimulant to obtaining needed information not otherwise available. Only some examples are mentioned here.

More data are being obtained on varieties of crops grown, production practices, expected utilization, and stocks. More vegetable and seed crops are covered now than previously. Information is being collected on numbers of fruit trees by age groups, and fruit and vegetable estimates are broken down by method of processing. For livestock more information is being obtained on cattle and sheep on feed; pig, calf, and lamb crops; quantities slaughtered; hatchery production; and broiler and turkey production. More detailed and frequent reports are made on the production of dairy products.

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[11] In 1944 the Bureau of Mines and the Geological Survey of the Department of the Interior cooperated in making reserve estimates for 39 important minerals. These estimates, together with a description of the methods and assumptions used in making the estimates were published in 1947 under the title of Mineral Position in the United States, as an appendix to the hearings before a subcommittee on public lands, United States Senate, 80th Cong., 1st sess., on investigation of the factors affecting minerals, fuels, forestry, and reclamation projects, May 15, 16, and 20, 1947. No systematic attempt has been made to bring the estimates up to date.

[12] The President's Materials Policy Commission in its report to the President, Resources for Freedom, calls attention to the absence of accurate data on mineral reserves and urges that this void be filled. (See vol. I, Foundation for Growth of Security, June 1952, p. 26.)

The Forest Service of the Department of Agriculture has major responsibility for assembling and keeping up-to-date information on our timber resources. Since passage of the McSweeney-McNary Research Act of 1928, it has had a continuing program of forest surveys in new areas and resurveys in other areas, supplemented by special nationwide reviews every 8 to 10 years. It also obtains much useful information from the Bureau of the Census through the regular censuses and from annual and monthly surveys.

Available series

The information collected by the Agricultural Marketing Service (formerly Bureau of Agricultural Economics) and the Bureau of the Census covers nearly every phase of agriculture and consists of a large number of different series, too numerous to mention, covering more than 150 farm products. Forecasts and estimates are made for the United States and each State and in a few instances for counties. Some are made annually, others monthly, and a few weekly.

In the case of crops, the basic series are those relating to acreage planted, acreage harvested, yield per acre, production, and value. Other series measure stocks, disposition, utilization, and foreign trade. For livestock and livestock products they cover number of units, production, value, disposition, utilization, and foreign trade. Related series measure the resources used in agricultural production such as acreage, persons working on farms, animal units, machinery, and other inputs. From these are derived indexes of output per man-hour, production per acre, production per animal unit, and output per unit of input.

At varying intervals the Forest Service measures the quantity and quality of our timber resources and the changes that are continually taking place in them. The most important series measure total acres in forests, supply of saw timber, drain, annual growth, production of forest products, and activities relating to national forests. Some of this information, particularly that relating to production of the more important forest products, is supplied by the Bureau of the Census.

Recommendations

The crop and livestock reporting system of the Department of Agriculture makes available a wide range of information about agricultural production, and it does so fairly economically and quite promptly. New demands for additional information are continually arising as new products, uses, and methods are developed. To the extent that funds were available these needs have been met. But there are many who feel that the collection and estimating procedures now in use leave much to be desired. A rather large revision in the 1951 cotton crop estimate near the end of the season caused new concern with the methods and led to an investigation by a special subcommittee of the House Committee on Agriculture.

The chief criticism of the system is that it lacks objectivity both in data collecting and in estimating procedures. More specifically the system is criticized for its inadequate mailing lists, selectivity in returns, complicated questionnaires, limited use of objective measurements, and failure of estimating procedures to correct for all biases.

Growing out of the subcommittee investigation was a request by the Department for funds to test new methods. In fiscal year 1954 they were granted $100,000 for this purpose, and it is expected that a similar amount will be available in fiscal year 1955. The 1954 funds were used largely to experiment with a new sample drawn from a list of cotton farmers in two States.

In the fall of 1953, at the instigation of this office, the AMS convened a panel of consultants to review their methods and to recommend improvements. Their general conclusion also was that the present system lacks the objectivity required of a major statistical program which supplies the Government and other users with very important data. They recommended that the system move as rapidly as possible in the direction of probability sampling and more objective measurements.

Following through on these recommendations, the Department developed an experimental program for 1954 that will operate in 10 Southern States. It will use an area sample and obtain information on acreage planted to various crops, number of livestock on hand, and a few miscellaneous items. If this general program proves feasible, it will be expanded as funds become available until it replaces the present program. This will require additional funds each year until the new program is fully established.

Over the years the Forest Service has been improving its methods of collecting data and estimating inventories, growth, and drain. But there is still need for better information from which to measure the drain on our timber resources. There is also need for speeding up the forest surveys so that the information will become available for all areas frequently enough to permit a complete review at least every 10 years. Generally speaking, the funds necessary to do this have not been available.

The importance of the Bureau of the Census in supplying benchmark data cannot be overemphasized. For some products this is the only source of data needed for checking annual series developed from sample data. Without a census at reasonably short intervals, the estimates for many products would become less reliable with the passage of time.

In 1953 an intensive review committee made a detailed appraisal of all census programs. Their recommendations emphasized strongly the continuing need for adequate census data. For agriculture they recommend that after the decennial census in 1960 the quinquenial censuses be replaced by sample censuses and sample surveys made biennially on an alternating basis. It is believed that this would be particularly helpful in improving the crop and livestock estimates of the Department of Agriculture.

Staff memorandum No. 10

MONEY, CREDIT, AND FEDERAL FINANCIAL DATA

By Edward T. Crowder

1. Statistics on Money and Credit

Historical development

Federal banking statistics had their origin in the early nineteenth century, and by the eve of the great depression were relatively well developed in terms of both coverage and quality. Balance-sheet data from the so-called call reports covering all "member banks" and accounting for about three-fourths of all commercial bank deposits, were available several times a year. Other banking and related data included current series on the assets and liabilities of the Federal Reserve banks; deposits and reserves of member banks; stock and circulation of money; bank interest rates; and open market rates and lending. Beyond such series, derived largely from banking and Treasury sources, the Federal Government had developed only a limited program of credit and related financial data. Some credit information had been obtained by the Bureau of the Census; some agricultural credit information flowed from the operations of federally sponsored farm lending agencies; and Federal data on Government securities supplemented the privately published statistics on the capital markets.

The decade of the thirties brought improvements in the established series as well as important new bodies of data. Under the deposit-insurance program, most nonmember banks came under Federal supervision, so that Federal call-report statistics covered by 1940 about 85 percent of total commercial bank deposits. New Federal programs concerned with farm credit, home finance, and the securities markets brought, as byproducts, new series of administrative data in these fields and stimulated the development of related series. Interest in international finance led to the development of series measuring the international flow of capital.

Still further improvements and refinements have appeared during the war and postwar years. These include the development of an annual series on deposit ownership; monthly estimates of leading assets and liabilities of all banks; improved data on bank interest rates; an integrated presentation of the various elements of the money supply; and, perhaps most conspicuously, a set of comprehensive monthly estimates of consumer credit.

Available series

The core of our banking statistics today are still the tabulations based on the "call report," a mandatory balance-sheet type of report required of all federally supervised banks semiannually (and more frequently of member banks). The tabulations show, at least semiannually, detailed classifications of loans, investments, and deposits. Federal call-report tabulations are available for different segments of the banking system and classified by different criteria. The

most comprehensive are those for all insured banks. Still more comprehensive (but less detailed) aggregates covering all operating banks (whether or not federally supervised) are also prepared. Earnings and expenses data for all federally supervised banks are also available, semiannually for member banks and annually for nonmember banks.

The call report data are supplemented by a variety of current banking series, including monthly estimates of principal assets and liabilities of all banks; weekly data on selected assets and liabilities of banks in leading cities; quarterly averages of interest rates charged bank customers; monthly debits to demand deposits; and annual distributions of deposits by type of owner. Related money market series deal with rates on and volume of commercial paper and bankers' acceptances. Assets and liabilities of Federal Reserve banks are available weekly, while the stock and circulation of coin and paper currency are reported monthly by the Treasury Department. The various components of the money supply, including bank and postal savings deposits and currency in the hands of the public, are brought together in a monthly synthesis of deposits and currency, with balancing assets and other accounts of the banks and monetary authorities. Federal Reserve bank and Treasury data are also consolidated into a weekly statement showing sources and uses of member bank reserve funds.

These general banking and monetary statistics are supplemented by a variety of related data in specialized and nonbanking fields. Thus, monthly estimates of intermediate and short-term consumer credit outstanding show such credit classified as installment and noninstallment, each further subclassified by type and by holder. The consumer credit data thus include information on sales finance companies, credit unions, and other consumer lending institutions, as well as department stores, furniture stores, automobile dealers, and other credit-granting retail outlets. The data on consumer credit outstanding have been supplemented only recently by monthly estimates of installment credit extended and repaid.

The Department of Agriculture and the Farm Credit Administration publish a variety of agricultural credit statistics. These include annual data on farm-mortgage credit outstanding by type of lender and by State; quarterly data on farm mortgage recordings; averages of interest rates on farm mortgages; estimates of non-real-estate agricultural credit outstanding; and a wealth of detail about the programs of the federally sponsored agricultural credit agencies. An annual Balance Sheet of Agiculture presents estimates of agricultural debt and financial assets in the context of a statement of total assets and claims.

The constituent agencies of the Housing and Home Finance Agency provide information on non-farm-mortgage finance, including statistics on home-mortgage recordings and foreclosures; outstanding debt on 1- to 4-family homes, the condition and activity of savings and loan associations; and a great deal of detailed information on institutions affiliated with the Federal Home Loan Bank System and the Federal Savings and Loan Insurance Corporation, and on the Federal mortgage insurance and related housing finance programs. Corresponding data on the mortgage loan guarantee program is available from the Veterans' Administration. The Board of Governors of the Federal Reserve System makes certain quarterly and preliminary estimates of mortgage debt outstanding.

The Securities and Exchange Commission produces monthly data on new securities offered for cash; quarterly data on issues registered under the Securities Act of 1933; weekly data on stock market price averages; and several monthly series on trading of various types on the securities exchanges. A considerable body of detailed data on Federal securities, their prices and yields, and distribution among various types of owners is available from the Treasury Department.

Recommendations

We have a great deal more statistical information about the working of our monetary and financial institutions and related credit phenomena than we do about many, perhaps most, of the other areas of economic activity. This is particularly true of the field of banking proper and of money supply—less true of related areas. In the context of this report, statistics of money and banking may be described as reasonably adequate for general analytical purposes. At the same time, because of the pivotal role of money and credit, there are important gaps and weaknesses for various types of more refined analysis and in nonbanking areas of finance.

In general the need for improvement in banking data lies in the direction of greater detail in the analysis of banking phenomena to supply data needed

for special problems and for analyses stemming from the social accounting approach. Thus more information is needed about the ownership of bank deposits, now covered in detail only on an annual basis. The relatively new technique of "money flows" analysis also calls for more refined banking data. Only a beginning has been made toward getting a breakdown of lending to business by type of business of borrower. There is a need for current information about small banks. There is increasing interest in data on the basis of gross flows as contrasted with balances.

Consumer credit statistics have only recently been completely overhauled. While there are, as may be expected in data of this type, weak spots to be strengthened, the data compare favorably with similar bodies of comprehensive estimates. The series would be benefited by regular annual data on retail credit sales from the Bureau of the Census and their quality depends to a considerable extent on the continuance of regular censuses of business to serve as benchmarks.

Statistics on agricultural credit are weak at various points. Data on mortgage debt outstanding and on recordings are weak as they relate to the loans of individual and other types of lenders not rendering good current reports. A particular need is felt for current data on the mortgage loan experience of leading types of lenders, and some experimentation is being done now on this. Estimates on non-real estate debt by lenders other than banks and federally sponsored institutions are conspicuously weak and are regarded as indicating only rough magnitudes. There is need for current data on loans by these miscellaneous lenders and creditors including merchants and individuals, who account for a considerable and volatile segment of agricultural debt. Although agricultural loans are covered with reasonable adequacy in the call reports, a current series reflecting specifically the activity of agricultural banks would be helpful. Discussion is under way of a semiannual survey of the credit and financial situation in agriculture covering both farmers and creditors and designed to anticipate financial difficulties.

Important weaknesses exist also in the field of nonfarm mortgage finance. Recordings data have certain weaknesses as to classification by type of lender which probably cannot be remedied within foreseeable budgets. We need better information on outstanding mortgage debt and how it is changing, in some detail; on the terms of current mortgage transactions; and on current obligations on outstanding debt. An integrated program of estimates of mortgage lending activity covering leading types of lenders has been under interagency discussion for several years, but the feasibility of the program has not yet been established.

In the field of the capital markets, important gaps include information on activity in the over-the-counter securities market, to balance our knowledge of trading on the organized exchanges; on the distribution of ownership of corporate securities; on the ownership of Government securities by State and local governments; and on the investment role of personal trust funds, pension funds and certain other investing institutions.

The detail and refinements which analysts call for in the field of money and credit need not be obtained on the basis of full coverage of the universes to be measured. Sampling is used now, and there is room for further development of sampling technique, as a means of minimizing burden on respondents, insuring the quality of estimates, and securing information specifically about respondents not readily measured except by sampling.

2. STATISTICS ON FEDERAL EXPENDITURES AND RECEIPTS

Historical development

Useful data on Federal Government receipts and expenditures and related financial series are available back to the beginning of the Republic. In recent decades important changes have taken place. Thus during the 1930's there were refinements of the current data with respect to the separate treatment of trust and budget transactions and of the finances of Government corporations. More recently, Federal financial accounting and reporting have been under systematic review by a joint staff of the Bureau of the Budget, the Treasury Department, and the General Accounting Office. Among the results of this review have been changes in the form and content of the current financial reports, aimed in part at greater accounting consistency. Also during the last decade and a half new forms of presentation of financial data have been de-

veloped including a functional classification and a "cash-consolidated" budget. As a reflection of the importance of our foreign aid and other foreign transactions, a special reporting program was developed to measure these activities.

Available series

The central core of the available data on Federal finance are the current series on Federal receipts and expenditures, balances, and the public debt. Until quite recently the Daily Statement of the United States Treasury was the basic source of such current information. Within recent months, however, the pattern has been changed. Now an abbreviated Daily Statement shows changes in the cash position of the Treasury, with breakdowns of income and outgo reported on a somewhat heterogeneous accounting basis and a minimum of classification detail. Supplementary tabulations deal with the public debt, interfund transactions, and the United States savings bond program, and once a month a great deal of additional public debt information is appended. A new Monthly Statement of Receipts and Expenditures of the United States Government now gives, with a 15-day lag, a summary of budget and other financial operations on a more consistent accounting basis (i. e. "checks issued") than has formerly been available currently. The form and content of the current reporting program is still under consideration and various users have been consulted as to their needs.

Data on Federal finance also appear monthly in the Treasury Bulletin as well as in the annual report of the Secretary of the Treasury and in the Combined Statement of Receipts, Expenditures, and Balances of the United States Government. The annual publication of the Bureau of the Budget entitled "The Budget of the United States Government" presents the President's proposed financial program for the Government, accompanied by a great deal of expenditure and related financial data.

Both the Treasury and Budget Bureau prepare, monthly and quarterly, respectively, expenditure data on the so-called cash-consolidated basis, their presentations being substantially identical though technically somewhat different. This basis involves a consolidation of the trust and budget transactions and the elimination of noncash transactions, and is designed to measure better than the ordinary presentation the impact of Federal finance on the private economy. Tables are also presented in the budget document classifying expenditures according to function and economic character.

In addition to the main stream of receipts, expenditures, and related data, there is a great variety of data stemming from Federal financial operations, measuring for example revenue receipts of various types, departmental expenditures, Government payrolls, the activities of Government corporations and credit agencies, foreign transactions of the Government, prices and yields and ownership of Government securities, and the stock and circulation of money.

Recommendations

Federal financial data, though voluminous and generally informative, have important shortcomings from the point of view of the economic analyst. Data on receipts and expenditures involve a time lag which makes analysis of movements over short periods difficult. We lack regular series to reflect more completely in other important ways the impact of Federal finance on the economy. Thus, the impact of new obligational authority enacted and of obligations incurred may lead by considerable periods the impact of actual expenditures; while Government insurance operations will also have an influence on the private economy. Again, the current series do not show Federal transactions conveniently in terms of categories suitable for social accounting analysis. A partial approach to this is being made in special annual tabulations which distinguish transactions in terms of their economic character, but the national income and money flows analysts are still obliged to make many adjustments in the data for use in their accounts.

There is some flexibility in planning the Federal financial series, in terms of arrangement of readily available data, frequency, and timing, and the current inteagency study may be effective in producing further improvements along these lines. But radical change in the Federal reporting system meets with impressive obstacles. Federal financial data are a byproduct of a tremendous and far-flung body of administrative and accounting procedures which cannot be changed quickly or cheaply. Moreover, the current trend toward fewer appropriations tends to make certain types of special classification more rather than less difficult. After the maximum adaptation of the Federal accounting pro-

cedures to economic needs has been made, with the aid possibly of advanced computing equipment, there will probably remain a problem of special adaptation of Federal data to economic analysis by means of supplementary reporting and statistical procedures requiring additional resources.

Staff memorandum No. 11

STATISTICS OF STATE AND LOCAL GOVERNMENT FINANCES

By Dana M. Barbour

Historical development

The 48 States and approximately 115,000 local governments—cities, towns, counties, townships, school districts, and special districts—spend a total of over $30 billion a year. While most of these units prepare annual financial reports, the Governments Division of the Census Bureau is the primary source of financial data for all governments presented according to uniform categories and including all funds.

From 1850 through 1900 some information on State and local governments was obtained in connection with the decennial censuses of population. Beginning in 1902 special censuses were taken at decennial intervals covering all governmental units in the Nation. In 1950 an act was passed (Public Law 767, 81st Cong.) directing that a census of governments be taken for 1952 and every 5 years thereafter. However, funds for this purpose were not approved by Congress in either the 1952 or 1953 budgets, so that the most recent census of governments is that covering the year 1942.

Data on the finances of cities has been collected annually by the Census Bureau for over half a century. At first all cities with a population over 30,000 were included, but from 1933 to 1941 coverage was limited to those over 100,000. Since 1942 all cities over 25,000 have been included. In 1915 an annual series on the finances of States was begun, which has continued to the present time except for the years 1920 and 1932–36. Annual reporting of financial statistics of counties was begun for a few counties in 1940 and gradually extended until about a third of all counties in the United States were included. In 1947, however, these reports were discontinued for reasons of economy.

In recent years the Census Bureau has undertaken the publication of national aggregates based on figures from nearly all large governmental units and a sample of the small ones. The first such report dealt with governmental debt, and was begun in 1940 with the cooperation of the Treasury Department. In 1947 a report on revenues was also undertaken, and in 1953 the first summary of governmental finances covering revenue, expenditure, and debt for 1952 was published. The addition of data on expenditures met one of the needs to which attention was called in the 1948 report on statistical gaps of the Joint Committee on the Economic Report.

Available series

The decennial Census of Government (called at one time the census of wealth, public debt, and taxation) presents data on the revenues, expenditures, debt, cash and security holdings of governments and publicly owned enterprises. Although this census is supposed to include financial data for all governmental units of every type in the United States, the 1942 census did not include some of the smaller units due to wartime conditions, and considerable estimating was necessary.

The annual series on State finances and on city finances include detailed information on revenue by type of tax or other source; on expenditures by function, character (e. g., current operation, capital outlay), and object (e. g., personal services, purchase of equipment); on borrowing and debt retirement, as well as debt outstanding by term and character; on cash and security holdings by type; and on finances of publicly owned enterprises, retirement systems, and social insurance trust funds. Particular attention is given to intergovernmental expenditures. The city reports provide greater detail for cities over 250,000, the information for which is compiled from official records and reports by Census Bureau representatives, instead of being obtained by mail as is done in the case of most smaller cities.

The summary annual report on governmental finances provides national aggregates by type of government of revenue by source; expenditure by function, character and object; debt transactions and debt outstanding; and cash and

security holdings. A special exhibit shows intergovernmental expenditure for selected functions. In the spring of 1954 information on revenue in 1953 was obtained from an expanded sample of local governments sufficiently large to permit the publication of State-by-State aggregates for revenue only. Whether this expanded revenue survey will become a regular part of the Census current statistics program is still somewhat uncertain.

Mention should also be made of the series on employment and payrolls, which provide national estimates based on a small sample of governments each quarter and State area estimates based on a larger sample once a year. Monthly employment and payroll figures are shown by type of government, with functional detail once a year.

Recommendations

The greatest current need in the field of local government financial statistics is for a complete census of governments. Data from the last such census is now 14 years old and reflects an abnormal wartime situation. In addition to the many uses of figures for particular local governments made by State and local officials, civic and taxpayers' associations, investment firms, educators and others, such a census would provide needed benchmarks and would make available aggregates for all governmental units within county and State areas. State area figures particularly are needed in determining the proper allocation of fiscal and functional responsibility among Federal, State, and local governments and in administering grant-in-aid programs in which allocation is made on the basis of need. In view of the time which would be required for changing the present law and preparing for a complete census of governments, however, it seems unlikely that any such census will be taken before 1957, which is the date now set by law. It would be possible to provide State aggregates for all governmental units within each State to cover the year 1955, however. This would necessitate a considerable expansion of the sample currently used to obtain the annual national estimates of State and local governmental finances already described. The Intensive Review Committee to the Secretary of Commerce in its appraisal of Census Bureau programs has recommended that a survey based on such an expanded sample be conducted biennially in order to provide data for State areas and large metropolitan areas.

A serious complaint about State and local government financial statistics in the past has been that they are not current. The Census Bureau has succeeded by vigorous efforts during the last few years in considerably reducing the lag in the publication of reports. Some delays are bound to occur, however, in compiling statistics from a large number of governments, some of which do not complete their accounts until some time after the close of their fiscal years. To speed up availability of data on State finances, the Census Bureau has followed the practice of publishing data for selected States before reports for all the States become available. From 1943 to 1947 it also published reports on State budgets. While budget documents do not always show expected revenue, and sometimes represent only expenditures from the general fund, even fragmentary data is useful in making current estimates or projections. Budgetary information for both States and large cities and the payroll data now obtained by Census might be supplemented by quarterly reports from a small but carefully selected sample which would include the largest governments. Then quarterly reports might include revenues, construction expenditures, and treasury balances, and might represent estimates where actual figures were not available. Information of this type would be of great value in analyzing developments in the governmental sector of the economy.

Staff memorandum No. 12

CURRENT EMPLOYMENT AND UNEMPLOYMENT STATISTICS

By Margaret E. Martin

Historical development

Enormous strides have been made in the measurement of employment and unemployment since the 1920's.

The development of labor force concepts and of scientific sampling theory have combined to produce current monthly estimates of the number and characteristics of the employed and the unemployed, information that was woefully lacking prior to 1940. These estimates, obtained by direct enumeration of a

small sample of households, have completely replaced the various widely conflicting indirect estimates of unemployment current during the 1930's.

At the same time great improvements have been made in the coverage, accuracy, and detail of employment statistics based on establishment payroll reports. As a byproduct of administering social security programs, nonagricultural benchmark statistics have been made available on a more comprehensive basis than ever before. At the same time the needs of State employment security agencies in particular have emphasized the importance of current State and area, as well as national, estimates of employment. These same State programs have also provided weekly information on insured unemployment from administrative records. A series on farm employment has been instituted.

Thus, there are now 4 sources of current information on labor market conditions, only 1 of which existed, in a much more limited form, in 1929.

Available series

The Monthly Report on the Labor Force.—This series, instituted by the Works Progress Administration and continued by the Bureau of the Census, provides estimates of the employed, the unemployed, and those not in the labor force, by direct enumeration each month of a sample of 25,000 households. Employed persons are classified by age, sex, and color, by whether they are engaged in agricultural or nonagricultural pursuits, by broad occupational groupings, and by number of hours worked during the week. In addition to age, sex, and color, duration of unemployment is shown for the unemployed. Those not in the labor force are classified by age, sex, color, and major activity during the survey week. Reasons for not working are obtained for persons with a job and not at work.

In addition to monthly net estimates, information on gross changes in labor force status is compiled each month by age and sex and various other characteristics. On occasion, additional details on part-time workers, on various fringe or marginal groups, etc., are made available and specific questions may be added from time to time to obtain information of current interest.

Employees in nonagricultural establishments.—The only current labor market indicators produced by the Federal Government in 1929 were the series of indexes of wage earner employment in manufacturing industries which the Bureau of Labor Statistics was then expanding to include selected nonmanufacturing industries. Collection of "all employee" figures, in addition to wage earners, was started in the midthirties. In recent years the program has been expanded, in cooperation with State employment security agencies, so that employment estimates are available nationally, for each State, and for about 100 local areas.

National employment estimates, excluding agriculture, the self-employed, domestic service workers and unpaid family workers are prepared for industry divisions and a large number of specific industries. Within manufacturing both all-employee and production-worker employment series are presented for 137 separate manufacturing industries, and within nonmanufacturing total employment is available for over 40 component industries. Hours and earnings of production workers are prepared for nearly 300 separate manufacturing industries and in nonmanufacturing 42 hours-and-earnings series are produced. Indexes of production-worker aggregate weekly man-hours are prepared for the 21 manufacturing major industry groups.

The current employment estimates are based primarily on monthly reports from a sample of 155,000 establishments, adjusted periodically to benchmark figures. The primary benchmark is provided by the State employment security agencies. This benchmark is supplemented by information from other sources—from the social security program for small firms; from the Interstate Commerce Commission for railroads; from the Civil Service Commission for Federal Government; from the Census Bureau for employees of State and local governments, etc.

Turnover rates, based on reports submitted to BLS by about 7,100 cooperating establishments, are prepared for 91 manufacturing industries and mining and communications.

Farm employment.—National estimates of agricultural employment are issued monthly by the Agricultural Marketing Service based on reports collected from about 20,000 farmers. The data obtained in these reports are adjusted when information is available from infrequent enumerative surveys of the farm population and from the periodic censuses of population and agriculture.

Unemployment insurance claims.—The Bureau of Employment Security reports weekly the number of initial claims and the volume and rate of insured unemployment under State programs which currently cover about three-fifths

of the Nation's labor force. Although not providing a count of total unemployment these administrative data are valuable because they are available each week and are shown separately for each State. Similar information for selected areas can also be made available when conditions warrant.

Recommendations

It is most desirable to measure the adequacy of our present program of employment statistics against certain standards of needs and uses to be met. For different purposes, different kinds of employment data are required. Without an exhaustive inquiry into needs and costs and a careful balancing of alternatives, it is still possible to point out major areas in which improvement can be made.

1. INTEGRATED ANALYSIS

The 1954 report of the Joint Committee on the Economic Report highlighted a number of shortcomings, among which was the need for more integrated analysis—more understanding of how the various employment and unemployment series fit together as well as more continuous attention devoted to reconciling differences. A beginning has been made toward meeting these objectives. The April 1954 figures from the Census Bureau, the BLS, and the BES were released in a combined report to the public, the first of a monthly series. Although a press release must be brief, some common analysis of the figures is provided and relationships indicated. A more fundamental analytical program together with additional research and experimentation to reconcile differences are needed.

2. REVIEW OF CONCEPTS, NEEDS

At the same time, to make sure that the most useful and enlightening information is being obtained, the Office of Statistical Standards has appointed a Subcommittee on Review of Concepts to its Interagency Committee on Labor Supply, Employment, and Unemployment Statistics. This subcommittee will undertake a thorough reexamination of Federal statistics on employment and unemployment to see how well they meet the needs of the public and Government for current information. The subcommittee will review concepts, definitions, and comparability of data from different sources; how well the resulting series provide the kind of data needed; and what improvements or changes are needed to provide more useful information. The subcommittee is now engaged in contacting individuals and organizations outside the Federal Government to obtain as wide a representation of views as possible.

Until the subcommittee has submitted its report, any list of needs must be considered as preliminary and incomplete. Among needs expressed from time to time in the past are:

1. A strong program of supplementary questions to the Monthly Report on the Labor Force, throwing additional light on particular aspects of the labor market. The quarterly questioning, recently reinstituted, of part-time workers to see how many are working short hours on account of economic conditions is one type of supplement. Annual inquiries into income, migration, school attendance, work during the year, are normally scheduled. But a relatively small investment in additional supplements would pay dividends in testing and refining measurement techniques and labor force concepts, in furthering reconciliation with other series and in illuminating various labor-market phenomena not measured in the regular monthly surveys.

2. Publication on a monthly basis of gross changes in the labor force (now compiled monthly, published annually). The number of persons who shift labor force status each month, their characteristics and the directions in which the shifts are made are valuable analytical tools. Speedier publication of special supplementary surveys is needed.

3. Additional cross-classifications and breakdowns in the Monthly Report on the Labor Force such as: the amount of unemployment among family heads; more detailed information on occupations; other cross-classifications between demographic and labor market characterics including income as well as labor force status.

4. More refinement in the analysis of the various series. Seasonal adjustments are one such refinement. Another is the proposal to construct measures of employment and unemployment in terms of man-hours. Estimates eliminating the effects of administrative factors from the insured unemployment counts would be a third.

5. Development of more information on a current basis of occupational patterns within industries and of the occupational mobility of workers. These data would be useful for mobilization planning purposes as well as general economic analysis.

6. Additional establishment employment series for industries classified at finer levels of detail. BLS has recently discontinued publishing a number of such estimates, for lack of adequate benchmark information for specific "4-digit" industries. State employment security data, used as benchmarks, are not made available for these finer groupings.

7. Separate information on employment trends in small business.

8. Labor force estimates for regions or selected local areas; establishment employment statistics for additional local areas.

9. Current information on monthly aggregates of hours actually worked, for productivity analyses.

3. IMPROVEMENT IN ACCURACY

Continuous study is required to maintain and improve the reliability of the various series. As a basic characteristic of establishments, information on employment is collected for a wide variety of purposes—as a base in accident-rate calculations; as a measure of size in tabulating production, capital expenditures, etc., in the various economic censuses; in connection with administrative and regulatory programs. The result of this variety of information on employment (some of it only partial or incidental to the main purpose of the inquiry) is that in this, more than possibly any other field, statisticians have become aware of the difficulties of complete enumeration, of consistent classification, of exact identification of reporting units. The effort to reconcile differences has already led to some improvements in accuracy; it should lead to many more:

1. *Sampling.*—Samples for both the population and establishment-type reporting programs need strengthening. The Monthly Report on the Labor Force sample is too small to support some of the additional desired detail; sampling errors of the smaller estimates are already higher than many users deem desirable. After the Review of Concepts Subcommittee has had an opportunity to evaluate the needs for labor force data, the question of appropriate sample size will have to be met.

Samples for BLS employment statistics by industry need improvement, particularly in some of the trade and service industries, where the present sample is thin. BLS receives reports covering the bulk of manufacturing employees, but even here, cutoff sampling rather than probability sampling is used although a probability sample was developed for metal-working industries during the Korean emergency. The farm employment sample and the sample used to develop labor turnover rates for manufacturing industries are both weak.

2. *Enumerative error.*—The study of errors arising during the process of obtaining information is just beginning. Ways must be developed of detecting, controlling, and measuring errors in response. Indications of such errors have been disclosed by techniques of reinterview, comparisons among various series or checking with more basic (and therefore presumably more accurate) records, such as comparing reports of age against birth certificates. We have gone far enough to know that the problem of obtaining accurate replies in accordance with specified concepts and definitions is far more difficult than is generally supposed. Research and experimentation in controlling enumerative and processing errors and in estimating the magnitude of nonsampling errors should be recognized and budgeted for as an integral part of any major statistical program.

3. *Benchmarks.*—The adequacy and accuracy of current series which depend on regular reference to benchmark totals to maintain their reliability are controlled in good part by the quality of the benchmarks themselves.

The interrelatedness of the Federal statistical system is nowhere more apparent than when the BLS current employment series is considered. On the one hand there is the interest in consistent totals with the overall Monthly Report on the Labor Force; on the other hand, concepts and classifications must be consistent with the wide variety of benchmark materials used. Additional uses to which the current employment series are put make other demands. For example, hours worked by industry are used by the Federal Reserve Board in constructing a number of its preliminary current production indexes; BLS figures are used in combination with Census Bureau production figures to estimate productivity; they are incorporated in the preliminary national income estimates.

For each of these uses comparability of industrial classifications, of time references, of reporting units, is important.

Continuous work to maintain comparability is essential. Two aspects of immediate importance may be noted:

1. The primary BLS benchmark source—State employment security agency reports of covered employment—needs revision. Nonmanufacturing establishments are classified on the basis of nature-of-business information which in many cases is more than 10 years old and by means of the out-of-date Social Security Board industrial classification code rather than the Standard Industrial Classification. The BLS current series are correspondingly weakened.

2. Part of the problem of achieving a coordinated system of statistics making maximum use of administrative byproduct statistics lies in the difficulty of defining the basic reporting unit uniformly in the various series. This urgent problem affects all employment series based on reports from establishments.

Staff memorandum No. 13

WAGE AND RELATED STATISTICS

By Dana M. Barbour

Historical development

For convenience wage statistics may be divided into two types—earnings and occupational wage rates—though a clear line of demarcation between the two is not always possible, particularly in the case of incentive workers. The Bureau of Labor Statistics series on average hourly and weekly earnings for individual industries dates from 1932, when man-hour data were first obtained on the BLS employment and payroll reports. At first national averages only were published. The number of establishments and the number of industries covered has gradually increased, and in 1947 a joint Federal-State program was begun which has resulted in average hourly and weekly earnings figures by broad industry groupings in all the States and about 100 metropolitan areas.

During the 1930's the BLS published a number of studies of annual earnings in various industries, made as a part of their regular industry wage surveys. These studies were limited in coverage, and were generally single-time surveys, however. The Social Security Act of 1935 led to more comprehensive data on annual earnings becoming available as a byproduct of the operations of the old-age and survivors insurance program, although the classification of wage earners by industry was not undertaken until 1938.

Industry wage surveys in which rates by occupation were obtained were begun by the BLS over 60 years ago. In 1912 studies based on payroll records were started in 12 industries. These studies were continued, for the most part on a biennial basis, until 1933, though there were some changes in industry coverage during this period. From 1934 to 1940 the selection of industries depended largely on needs for data under the National Industrial Recovery Act, the Fair Labor Standards Act and the Walsh-Healey Public Contracts Act. Emphasis during this period was placed on the low-wage consumer goods industries. With the defense program, emphasis was shifted to heavy industries. During the war years the occupational wage program of the BLS reached its highest level. A large number of industry and area surveys were conducted for use by the National War Labor Board in the wage stabilization program. In addition many special studies were made for use in the settlement of disputes. A similar, though short-lived, expansion occurred during the recent defense mobilization period in connection with the work of the Wage Stabilization Board.

Mention should be made of the annual union wage scale surveys, some of which date back to 1907. In these surveys, principally made by mail, information is obtained from union officials on wage rates for the principal occupations in four highly organized industries—construction (for which quarterly information is also obtained for a smaller number of occupations), printing, motor-trucking, and local transit. Recent budgetary reductions have resulted in the elimination of baking, and in a reduction in the number of cities covered from 77 to 52.

From 1943 to 1948 the BLS prepared an Index of Urban Wage Rates which showed movements for industry groups in manufacturing, for manufacturing as a whole, and for a selected group of nonmanufacturing industries on a national basis; and for manufacturing and selected nonmanufacturing industries in each of 28 cities. These indexes were based on data collected semiannually from

about 6,600 identical establishments. The index was designed to reflect general wage rate changes and individual increases, but to eliminate such variables as premium pay for overtime and late-shift work, interindustry and interregional shifts in employment, and changes in occupational structure.

In 1949 the BLS began its community wage survey program, in which occupational data are collected on a cross-industry basis. At first this was on a limited basis, but in 1952, 40 metropolitan areas were surveyed with the aid of funds transferred from the WSB. At present the number of areas surveyed has been reduced to 17 of the largest cities. While there have been some changes in coverage, most of these 17 cities have been surveyed each year since 1951.

Available series

The BLS series on average weekly and hourly earnings are based on the employment and payrolls reports described in the section on employment and unemployment statistics. Payroll figures are reported before deductions for taxes, social insurance, etc., and include pay for overtime, sick leave, holidays, and vacation. Average hourly earnings are obtained by dividing total payrolls for production and related workers (or nonsupervisory workers in industries other than mining and manufacturing) by total man-hours reported for such workers. Average weekly earnings are computed by multiplying average hourly earnings by average weekly hours--the latter figure being obtained by dividing weekly man-hours by the number of production workers. Indexes are prepared for both average hourly and weekly earnings.

Average hourly and weekly earnings figures reflect not only changes in basic wage rates, but also premium pay for overtime and late-shift work, changes in employment of workers as between relatively high-paid and low-paid work, and relatively high- and low-wage companies, and changes in the output of incentive workers. In order to eliminate the first of these variables BLS publishes national estimates of average hourly earnings exclusive of overtime, and indexes based on these estimates going back to 1939, for all manufacturing and the durable and nondurable goods subdivisions. These estimates are computed by the application of an adjustment factor based on a 1942 special study of the relationship between average weekly hours and the average number of weekly overtime hours in the same period. While these factors are still fairly accurate as applied to all manufacturing, they are not generally valid for individual industries or areas. In addition to estimates of hourly earnings exclusive of overtime, the Wages and Industrial Relations Division of the BLS computes for all manufacturing an index of average hourly earnings excluding overtime and certain interindustry shifts. This is done by maintaining constant weights based on October 1943 industry group employment. Only the effects of shifts in employment among major 2-digit industry groups are excluded; the figures are affected by shifts among individual industries.

In order to obtain a rough measure of "take-home" pay the BLS has made estimates of deductions for social security and income taxes (the latter computed both for a worker with no dependents and a worker with three dependents). These have been subtracted from gross average weekly earnings and the resulting figures published both in current and 1947–49 dollars. The adjustment for changes in purchasing power is made by deflating weekly earnings by the Bureau's Consumer Price Index.

The annual earnings data tabulated in connection with the old-age and survivors insurance program are based on a 1-percent sample of all social security accounts. These tabulations show the number of all workers by amount of annual wages, and the number of four-quarter workers by amount of annual wages, age, and sex. Information on annual wages is also shown for all workers and 4-quarter workers by 2-digit industries, and by States. Some of this information is shown by sex and age, and for single-industry workers.

The usefulness of the OASI statistics for wage purposes is limited. Even four-quarter workers are not necessarily employed full time in each quarter. Annual earnings are shown in fairly broad class intervals, no averages being published. Earnings over $3,600 a year are not counted in computing benefit amounts and are therefore not included in the tabulations. Those not covered at present under the old-age and survivors insurance program include most government employees and some farm and domestic workers, as well as many self-employed persons. Finally, there is a time lag of about 2 years before tabulations become available. Some of these limitations may be overcome in whole or in part as the result of proposed changes in coverage of the Social Security Act and in administrative arrangements.

The principal source of occupational wage rates for nonagricultural employment is the BLS. As has already been indicated the surveys made have been of two principal types—industry and community. At the present time nationwide studies of wage rates in selected occupations are made in 4 or 5 industries a year by BLS field agents, and mail surveys with some followup by personal visit are made for a few additional industries. In the latter case plant distributions of straight-time hourly earnings are obtained, but not earnings by occupation. BLS is now undertaking a number of such mail surveys to supplement data already available so that estimates of the distribution of hourly earnings can be prepared for all manufacturing. The last such estimates were made in 1947.

In the community wage surveys of the BLS about 65 occupations—office clerical; semiprofessional and technical; maintenance; and custodial, warehousing and shipping, are studied on a cross-industry basis. In addition a few characteristic industry occupations are covered for a few of the leading industries in each area. Occupations selected are key occupations from the standpoint of prevalence, number of employees and importance in collective bargaining. Data are collected by field agents from a carefully selected sample of establishments. Information on such practices as premium overtime, paid holidays and vacations, health and welfare insurance, and pension plans, as well as on wage rates, is obtained.

The present BLS program places greater emphasis on the level of rates for particular occupations than on measurement of changes. Results of the survey of union wage scales are presented in the form of both dollar amounts and indexes. Indexes are also prepared for a few additional occupations or professions. These include teachers, municipal firemen and policemen, Federal workers in the classified service, and workers in the machinery and laundry industries. Chronologies summarizing changes in wages and related wage benefits have been prepared for about 40 leading companies or bargaining associations. In addition the BLS publishes a monthly report, "Current Wage Developments," which shows major wage adjustments throughout the country, obtained from newspapers and other secondary sources. No effort is made to present industry or other averages.

The Agricultural Marketing Service of the Department of Agriculture, in connection with its crop reporting program described elsewhere, has collected information on wage rates since 1866. The farmer is asked once each quarter to report average rates being paid in his locality. Daily, weekly and monthly rates with room and board, with house, and without either are published by States and geographic regions, and quarterly and annual indexes going back to 1910 have been computed. In addition, a series dating back to 1945 shows for the United States as a whole days worked and wages earned during the year at farm and nonfarm work by farm workers with 25 or more days of farm wage work. Detailed wage rates on specific operations are also obtained occasionally by the Department of Agriculture by interview-surveys of farm operators and agricultural workers. The data obtained in these surveys are usually by region or specialized area. In recent years the Bureau of Employment Security of the Department of Labor has collected some wage rate information for particular farm operations in connection with the program for importation of Mexican agricultural workers.

Some wage information for particular industries is collected by other Federal agencies having regulatory or other functions. Thus the Interstate Commerce Commission obtains data on wages and salaries of railway employees in considerable occupational detail. The Federal Communications Commission and the BLS study jointly the earnings of communication workers by occupation. The Civil Aeronautics Administration publishes annual salary data by classes of employees, and the Bureau of Public Roads in the Department of Commerce compiles a series on average rates per hour by geographic divisions for unskilled labor employed in road building on Federal-aid projects. A few Federal agencies, notably the Department of Defense, collect considerable wage data in order to ascertain prevailing locality rates for use in setting wage rates for their own unclassified employees. Such data are not usually published, however.

A number of nongovernmental agencies conduct wage and salary studies. The National Industrial Conference Board makes periodic studies of clerical salaries and wage rates in selected production and maintenance occupations, based on reports from several hundred companies in a number of large cities. It also studies top management salaries—a field not touched in Federal surveys. The National Office Management Association's annual survey of salaries of office workers is probably the largest nongovernmental wage or salary survey. The last such survey was based on reports from about 3,500 companies in 90 cities in

the United States and Canada and covered 18 different office jobs. Many trade associations make surveys of wages, salaries, and fringe benefit practices in their industry. In a number of cities or counties surveys are made by local industrial councils or employers' associations, sometimes for particular industries or types of workers, sometimes for all industries. While much useful information is obtained in these nongovernmental surveys, results are usually made available only to participating companies or to members in the case of trade associations. Moreover, most of them are conducted by mail, which makes it difficult to assure job comparability in the case of industries with complicated occupational structures. Finally, companies to be surveyed are not usually selected by scientific sampling methods, and in some cases the proportion of the universe covered is not even known.

Recommendations

There are several areas in which wage statistics should be expanded, though for purposes of general economic analysis the needs in other fields of statistics are undoubtedly more urgent. The greatest uses of wage statistics are in collective bargaining, in wage and salary administration by employers and governmental agencies, in determining plant location, in occupational guidance and counseling, and in industrial relations research. Nevertheless, data on general wage movements are important for economic analysis and for control purposes in time of war or national emergency, and information on straight-time hourly earnings is essential in determining Federal and State minimum wage policies. Occupational wage rates on an industry basis are also needed by governmental agencies formulating policies for problem industries or areas (e. g., the New England textile industry), or in connection with tariff determinations.

Existing data are inadequate to record accurately the movement of wage rates for the economy as a whole or for particular industries, though estimates are possible based on the straight-time hourly earnings series, the BLS wage chronologies, the reports of wage changes, and other wage information. This need for more accurate measurement of wage movements might be met by reviving the BLS index of urban wage rates described under Historical Development or by expanding the community wage and industry survey programs to obtain sufficient data for the construction of indexes. In either case, considerable exploratory work and additional funds would be necessary. It might be noted that Convention No. 63, adopted by the International Labor Office in 1938, but never ratified by this country, calls for statistics of wage rates for the principal occupations in a wide and representative selection of the different industries at intervals of not more than 3 years and such figures in the most important of these industries at least once a year. Annual indexes showing the general movement of wage rates are to be compiled on the basis of these statistics. Not only do our existing statistics not meet this standard; in this particular area they are inferior to those of most other industrial nations.

Information on the distribution of hourly earnings has not been satisfactory for determining minimum-wage policy. This is particularly true for low-wage and problem industries. As has been indicated, this deficiency is now being remedied to some extent by special mail surveys designed to enable BLS to prepare estimates of the distribution of hourly earnings for manufacturing.

Finally, one of the most serious gaps in this field at the present time is our lack of information about the cost of supplementary remuneration and benefits. Premium pay, paid vacations, health and welfare insurance, pensions, and other fringe benefits are increasing in scope and importance. The BLS, as has already been indicated, gets considerable information about the nature and prevalence of such supplementary items, but has done little on their cost to employers. The National Income Division in the Department of Commerce estimates the amount of these supplements to wages and salaries by industry, but these estimates are not very reliable, especially for private pension and insurance plans. The United States Chamber of Commerce has made several studies in this field during recent years, but their reports are based on only a few hundred cooperating firms. Some trade associations and local industrial councils have also obtained in their surveys data on the cost of wage and salary supplements, but distribution of the results of these studies is generally limited to the membership of the association. A pilot survey is now being undertaken by BLS to obtain data from a selected sample of 1,000 manufacturing establishments on the cost of these supplemental items and to ascertain the availability of such information from employers' records. Until the results of this survey are known, proposals to fill this particular gap would be premature.

Staff memorandum No. 14

ADEQUACY OF PRODUCTIVITY STATISTICS

By Robert B. Steffes

Historical development

Pioneering work in the measurement of labor productivity was done by C. D. Wright and others before 1900, but the main impetus to study of the relationships between output and labor input came in the 1920's. Partly due to the availability of the biennial Census of Manufactures, the Bureau of Labor Statistics during this period began publishing annual data on productivity in manufacturing industries. The depression of the 1930's stimulated a great increase in productivity research both in and outside of Government. In the following decade work on long-range changes in productivity at the National Bureau of Economic Research provided the basis for subsequent work by BLS, whose Productivity Division began operations in 1941. As technical difficulties in measurement became more serious, culminating in the war years, productivity conferences were held to discuss the problems from the various points of view of industry, labor, and Government. In 1948 the Joint Committee on the Economic Report pointed up notable statistical gaps in this area.

Available series

Annual indexes of labor productivity are published by the Bureau of Labor Statistics about 2 years after the date to which the figures relate. The most recent published indexes at the present date are for 1951. These were published in the 1951 supplement to the Handbook of Labor Statistics and covered 23 manufacturing series and 10 series in other sectors, such as mining, utilities, transportation, and agriculture. Utilizing data compiled by Solomon Fabricant for the National Bureau of Economic Research and work done by the Work Projects Administration national research project, BLS carried many of these series back to 1919 or earlier years. These indexes are based upon 1939 as 100 and were derived for the most part by relating an index of production to an index of man-hours. Data for various years are shown for 13 additional series based upon direct field studies made by the Bureau between 1939 and 1951. These direct studies were subsequently discontinued.[12]

The published series for manufacturing industries represent only a small part of the total number of indexes maintained on an annual basis. Over 150 will be weighted together to constitute the new index for the manufacturing sector scheduled for publication at the end of this year, but there is no plan to publish this amount of detail. No overall index for manufacturing has been published for years after 1939, nor is there currently published a productivity index for the entire economy.

Technical notes on the methods of preparing the above indexes are included in Techniques of Preparing Major BLS Statistical Series, bulletin 993, United States Department of Labor.

Recommendations

1. An overall measure of national productivity is needed.

One important indicator of national economic well-being is the ratio between the output of the economy, as measured by goods and services, and its manpower, as measured by population, number of workers, or man-hours. This measure of productivity reflects not only changes in productivity which may occur as a result of technological change or as a result of increased knowledges and skills in the labor force, but also reflects the shifts in production which may occur between industries with high and low productivity. Thus the GNP (gross national product) productivity measure would show an increase in productivity if the number of workers in high-productivity industries increased relative to the number of workers in low-productivity industries, even if the productivity of all individual industries remained constant over the period in question. Since the only way of combining all of the heterogeneous goods and services into a single aggregate is through the use of value figures, it is necessary to convert value figures to approximate "physical" measures by dividing them by an index of prices. For this to be a successful operation, one must be able to specify for each sector (or industry) a "product" to be priced; where this is impossible (as in the construc-

[12] The factory performance studies which have been carried on in the Bureau for the Foreign Operations Administration in recent years are in the nature of case studies and are not of direct concern here.

tion industry) one resorts to an imputation based upon costs of materials or labor costs. An additional problem arises from the fact that in certain industries—Government, trade, etc.—we have no valid measure of output even in value terms, and must substitute man-hours or employment, with the result that productivity is arbitrarily ruled a constant. Despite the difficulties, it is probable that the resulting measure of productivity has real meaning, and would be especially useful if periodically available for total, for farm and nonfarm, and for principal industrial sectors. It might also be desirable to provide separate indexes with different systems of weights, since there is no uniquely satisfactory system. Since all the elements needed for the preparation of such a series are available quarterly or oftener, there is no fundamental reason why this could not be available for current short-run analysis.

2. Studies of unit man-hour requirements on products and subproducts in selected industries, yielding industrywide productivity measures, are needed.

The overall types of productivity index described above are not very useful measures from the point of view of a standard of performance against which individual plants may compare their own performance, nor do they provide an adequate basis for comparisons among industries. Indexes for these uses ideally would have four characteristics: (1) For the short run they should be as free as possible from changes due to altered product-mix within the industry; (2) for the long run they should reflect as nearly as possible the current product-mix; (3) they should be unaffected by changes in integration and by changes in the amount of subcontracting; (4) they should reflect not the shipments of the industry but actual production. Indexes of man-hour requirements prepared by relating production indexes compiled for one purpose to man-hour indexes compiled for a different purpose seldom can have these characteristics. What is required are more numerous and more frequent studies of the BLS direct type, where such important factors as direct and indirect labor, extent of subcontracting, product-mix changes, integration, relationships between production and shipments, and many others, as well as specific labor inputs by product and subproduct, can be studied. This is especially true of multiproduct industries and those in which productivity is undoubtedly related in some way to the degree of capacity utilization, as in chemicals. This is the type of approach to productivity measurement which should provide the historical perspective called for in Statistical Gaps, as well as providing a most valuable tool for analysis of factors associated with productivity change.

3. More of the productivity indexes for individual industries already available should be regularly published.

Difficulties in methodology, lack of adequate or comparable information, and dangers in misinterpretation have combined to act as a strong deterrent to publication of productivity relationships. As a consequence much of the arduous and useful work done in establishing a fair degree of comparability between production measures and man-hour data has not been made widely available. If this were done, on a discriminating basis with adequate warnings of the pitfalls involved in their use, the art of measuring productivity would profit thereby. It is true that such indexes would require frequent revision as the basic production, man-hour, employment, and price series themselves were modified and improved, but this fact has not deterred the publication of other statistical series whose usefulness has been repeatedly demonstrated. It will be especially important, if BLS publishes an all-manufacturing index, that the two-digit groups and many of the important supporting industry indexes be periodically available to aid in interpreting the changes in the manufacturing sector.

4. Additional research is needed into the application of accepted concepts to the practical problems of collecting, assembling, and analyzing data in this area.

In the interest of brevity, only a few examples are given below of the kinds of developmental research which are needed:

Sources of data and methods for measuring nonlabor inputs should be investigated.

The productivity of labor entering all stages of the productive process should be analyzed with respect to selected consumer end-items. This is particularly important to the measurement of manpower requirements and to the assessment of offsite employment resulting from public-works programs.

There are certain parts of the economy which have no well-defined product, and as a result the usual methods of compiling a productivity index may be infeasible. Special attention needs to be given, in these segments, to methods based upon imputation or to fundamentally different methods of approach. Among these are trade, construction, Government, services.

If there is a secular trend (as suggested by the evidence) in the substitution of overhead employees for direct production workers, then a productivity index based upon direct production workers only which shows decreasing man-hour requirements may be misleading. We have no measure of the extent to which the increased employment of scientific, professional, technical, and clerical workers is an offset against decreases in direct production workers, and study of this phenomenon is needed.

The effect of reduced funds in the regular program has been the elimination of the direct productivity studies, which were taking an average of 3 man-years per industry; and a cutback in the analytical work on the factors associated with productivity change. In the peak year, 1950, about two-thirds of the man-years on the regular funds were devoted to direct studies, and one-third to work on series from secondary sources. Most of the work on secondary sources is typically put in on production series. Currently, about 155 manufacturing series and 10 nonmanufacturing series are maintained.

Staff memorandum No. 15

THE ADEQUACY OF STATISTICS ON THE CHARACTERISTICS OF THE POPULATION

By Joseph W. Kappel and Alexander Gall

Historical development

The census of population, taken every 10 years by the Bureau of the Census in the Department of Commerce, provides our basic data on the size and characteristics of the population of the United States. The first census was taken in 1790, and was little more than a head count of the population. In 1810 several more characteristics of the population were covered and in the following decades there was a successive broadening of the scope of the population census. Although there has been no significant change in the magnitude of the population census in recent decades, the year 1940 marked the first systematic use of sampling procedures for a number of questions on the census form.

Statistics on births, deaths, marriages, and divorces are collected by the National Office of Vital Statistics in the Public Health Service, Department of Health, Education, and Welfare. Collection of mortality statistics on a national basis was begun in 1900 and of birth statistics in 1915. Initially these statistics covered only 10 States. Since 1933 the entire United States has been covered. Statistics on marriages and divorces have been reported since 1946, but divorce figures cover only 29 States at present.

The Public Health Service has compiled statistics of illness and disease, covering the most common communicable diseases, since 1912 and has published these data since 1914. Additional morbidity statistics have been obtained through the Current Population Survey. A national survey of the health of the urban population of the United States was conducted in 1935–36.

Since its establishment, the Office of Education in the Department of Health, Education, and Welfare has conducted an extensive statistical survey of education in the United States. Until the school year 1915–16, these data were furnished annually in the report of the Commissioner; since then they have been furnished biennially.

A survey of degrees granted in the United States has been conducted annually since 1948.

Available series

The census of population provides statistics on the number and characteristics of the population, including age, sex, marital status, place of birth, citizenship, employment status, occupation, education, income by source, number of children ever born, race, residence, and change in residence during the preceding year. These data are presented in separate releases for the United States as a whole, each of the four major regions of the country, States, large metropolitan areas, and individual counties and cities.

The NOVS in its monthly vital statistics report presents monthly and cumulative data on births, marriage licenses, deaths, and infant deaths, for States, certain cities, and Hawaii; and on marriage licenses for major cities; death rates by cause, age, race, and sex, estimated from a 10-percent sample of death certificates filed in State and independent city vital statistics offices; and divorce data for a limited number of States and Hawaii. An annual report—vital statistics of the United States—gives statistics on births and deaths by place

of residence and by place of occurrence, with supplemental tables for Alaska, Hawaii, Puerto Rico, and the Virgin Islands. In its morbidity and mortality weekly report the NOVS furnishes statistics on the number of cases reported during each week by States for 25 communicable diseases, and by cities for a smaller number of diseases; and total deaths registered in each of 106 major cities.

The Office of Education publishes its Biennial Survey of Education in separate chapters as the data become available following each biennium surveyed. This provides basic statistics on enrollment, personnel, finances, and administrative units for various types of schools and libraries in the United States. The publication Earned Degrees Conferred by Higher Educational Institutions provides annual data on the number and type of degree granted by each institution of higher education in the United States. There is also a table of degrees granted by field of study.

Recommendations

Because of the rapid growth and extraordinary mobility of the American people, there have been demands for a simplified population census at the midpoint between decennial censuses—the so-called quinquennial census. The Current Population Survey provides continuous data on the characteristics of the population, but the small size of the sample used precludes estimates for small areas. To some extent the demands for small area information from those interested in internal migration, labor force changes, and market research may be satisfied if present discussions succeed in coordinating old-age and survivors insurance data with information compiled by the Internal Revenue Service and other Federal agencies. As presently contemplated, a 1-percent sample of BOASI data will provide the Bureau of the Census with information for population estimates on a State level. For information on smaller areas—counties and cities—as much as a 10-percent sample may be necessary.

In the field of vital statistics, steady progress has been made toward complete coverage of the population with regard to births, deaths, and marriages. Divorce figures, on the other hand, are only published for 29 States representing 46 percent of the population. Although the number of States cooperating with the NOVS in the compilation of divorce statistics has increased steadily during recent years, the goal of complete national coverage on a uniform basis will not be achieved in the near future without concentrated effort.

Aside from collections of data on communicable disease, there is no current program for the collection of statistics on illness except for occasional supplementary questions added to the Current Population Survey. In general, the need for data on illness and impairments of the population of the United States remains unmet. Some consideration should be given to formulating an adequate system of reporting on health and illness in our society.

The Biennial Survey of Education of the United States Office of Education is a very valuable source of basic information on education in the United States. The most frequent criticism of this survey is that the data appear as much as 3 to 4 years after the school years covered. The major cause for delay is undoubtedly the slowness with which many State departments of education compile and make available information for their respective States. However, in view of the numerous demands for more recent data, the Office of Education should be persuaded to make a major effort to overcome this difficulty.

AGENCY STATEMENTS

(The following letters from individual agencies were received by the Bureau of the Budget in the course of preparing the foregoing statement and appendixes:)

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM,
Washington, D. C., June 15, 1954.

MR. STUART A. RICE,
Assistant Director for Statistical Standards,
Office of Statistical Standards,
Bureau of the Budget, Washington, D. C.

DEAR MR. RICE: In reply to your letter of May 14, 1954, we believe that the most important requirement for increasing the efficiency, reliability, and accuracy of existing statistical series is a firm program of periodic censuses. The availability

of benchmark statistics at relatively frequent intervals is an indispensable prerequisite to improved current series. Comprehensive censuses of manufactures, minerals, business, agriculture, housing, and government should be taken with reasonable frequency and should be supplemented by intercensal surveys based on samples. The programs in this field recently recommended by the Intensive Review Committee appear to us to be appropriate.

A second general requirement, in our view, is a speedup in processing of data, so that more timely figures can be made available for use. Substantial progress has been made recently by some agencies with respect to current monthly statistics, and much more can be done in this area. More importantly, release of benchmark data needs to be speeded up. However, improvements in timeliness should not be carried to the point where the quality of the data is seriously affected.

Some of the more important specific limitations in existing series and programs—as we see them—are touched on in the attachment. In a memorandum on the programs of the Bureau of the Census to the Bureau's Intensive Review Committee, dated October 21, 1953, we discussed some of the important specific limitations in existing series and programs in greater detail. It is my understanding that a copy of this memorandum has been made available to the Office of Statistical Standards.

Because of limitations of time, the attached summary of our views regarding statistical needs in specific areas is confined to programs which have recently come under our review. The remarks are also confined to major needs and do not include miscellaneous gaps which are currently receiving the attention of the compiling organizations, nor a number of subjects now under review by committees organized by the Bureau of the Budget in their continuing program for improving Government statistics.

Sincerely,

RALPH A. YOUNG,
Director, Division of Research and Statistics.

COMMENTS ON NEEDED IMPROVEMENTS IN FEDERAL STATISTICAL PROGRAMS

Production

The Federal Reserve index of industrial production, which is developed from basic data compiled by other organizations, would be strengthened by the collection of physical output data for important products for which adequate current information is not now available. Some of these data, such as for glass, brass mill products, and woven synthetic fabrics, for example, would be desirable on a monthly basis; others, such as data for various types of machinery, converted paper products, and manufactured cereal products, would be necessary only annually.

It would be desirable to have periodically manufacturing industry shipments data broken down to show the flow of goods to various broad classes of purchasers. Such information would be useful for many purposes including analysis of production trends in relation to other developments in the economy.

At the present time some production data are available on a weekly basis (for autos, steel, coal, lumber, petroleum and products, paperboard, and a few other products) and it would be highly desirable to expand the collection of weekly data where feasible. For example, it would be advantageous to have weekly output figures for additional branches of the textile industry. In some strategic areas where collection of weekly output figures would not be feasible—for example, various machinery industries—weekly data on man-hours or payrolls should be collected.

Labor force and employment

A serious weakness in the area of labor force and employment statistics as compiled by the Bureau of the Census is lack of current data on a regional and local basis. Such data would be extremely useful for a variety of analytical purposes in determining geographical differences in employment and unemployment changes. In order to obtain reliable figures by cities and regions the present sample for the labor force household survey would need to be expanded.

More detailed information on the characteristics of persons employed, unemployed, and outside the labor force is needed, for which an increase in the size of the sample also would be required. The household survey is an especially useful tool for obtaining information on attitudes and expectations of persons in respect to their labor force attachments, job possibilities, and conditions under

which they would take current or future jobs and the survey should be used more fully for this purpose. The magnitude of underemployment should be more adequately explored in regard not only to hours of current work but also in terms of skill utilization and income. Varying degrees of attachment to the labor force of persons currently classified as unemployed or outside the labor force should be more clearly examined in order to make the concepts of "unemployment" and "labor supply" more meaningful.

Efforts to reconcile information obtained from household and establishment reporting should be continued. Tabulation of benchmark statistics from social security data should be made in sufficient detail to permit compilation of additional current industrial employment data. Seasonally adjusted series for labor force, employment, and unemployment should be prepared and published regularly.

Prices

One difficulty with the wholesale and consumer price indexes compiled by the Bureau of Labor Statistics is that, particularly in periods of price weakness, they may not always reflect actual transaction prices, including any reductions made in the form of discounts from established list prices, larger trade-in allowances, freight absorption, or other concessions. The Bureau is aware of this problem and attempts to deal with some of its manifestations. But the problem is a difficult one, particularly for consumer durable goods in both the wholesale and consumer price indexes, and for machinery and some intermediate products such as steel in the wholesale index.

If for conceptual or other reasons, these issues cannot be met adequately within the framework of the regularly published indexes, subsidiary indexes, or special studies might meet the need. The Labor Department study of delivered prices of steel in the period from 1939 to 1942 is one illustration of the type of investigation that could be useful. More intensive efforts might be made to obtain actual prices paid by consumers for durable goods. In the case of automobiles, collection of data on trade-in allowances would also be desirable. It may be that some automobile manufacturers already collect such data from their dealers, or collect information from which they could be approximated. The importance and volatility of demand for consumer durable goods justify the expenditure of increased resources in the collection of such information.

It would be desirable for analytical purposes to have a breakdown of the consumer price index between goods and services. Such indexes were published regularly prior to release of the revised index in January 1953, and a special study published in the May 1954 Monthly Labor Review brought them up to date through the end of 1953. Regular publication of these indexes would be useful to many analysts. Also, it would be desirable to resume publication of indexes for many individual items and groups of items represented in the consumer price index.

Inventories

With regard to inventory data, it is extremely important that current monthly information on value of stocks at all levels be greatly strengthened. The lack of adequate inventory data is one of the most serious deficiencies in the current Federal statistical program.

Current analysis also would be greatly facilitated by much more and better monthly physical quantity data on inventories of important materials at producing and consuming plants, and of important finished goods in the hands of producers, wholesalers, and retailers. It would also be useful to have value of inventory data broken down by legal type of organization of the holder, i. e., corporate or noncorporate.

Manufacturers' orders

The Department of Commerce's current monthly figures on manufacturers' orders should be strengthened.

Retail sales

The accuracy of initial estimates of retail sales needs to be improved. It would also be desirable to make occasional spot checks for types of outlets which cannot be reported regularly. Monthly retail sales data by products would be valuable for selected items, such as important consumer durable goods and farm machinery. For some products, such as furniture and farm machinery,

value data would suffice; for others, such as selected consumer durable goods, physical quantity data would be desirable if collection is feasible.

Periodic information on the number of automobiles bought by business, and on the extent to which privately owned automobiles are used for business purposes, would be very helpful in analyzing data on consumer expenditures and consumer credit.

Financial data

One of the major gaps in our knowledge of the operation of the economy relates to the income, investment, and financing of unincorporated businesses. Benchmark data on the earnings of sole proprietorships and partnerships have not been available on a regular basis. Current estimates of the inventory position and plant and equipment expenditures by these enterprises are based on very fragmentary data, which do not permit adequate distinction by industry or size of company. Further, data on the asset holdings and long- and short-term debt position of these organizations are inadequate. All in all, the available information relating to unincorporated business—an important segment of the economy—is far too little for analysis of the many economic problems in which they play an important part.

Corporate financial data should be available without the present long delay. Efforts being made to advance the release date for the FTC–SEC quarterly financial report on manufacturing corporations should be strongly encouraged. In the past, the time required for compiling and releasing the data has customarily exceeded 3 months and has sometimes been as long as 5 months. The profit and other corporate data compiled by the Internal Revenue Service should be published promptly, possibly on a sample preliminary basis as has been done at times in the past.

In several areas outside of manufacturing, comprehensive corporate financial data covering income and balance sheet items, such as income, expenses, profits, debt, inventory, and the like, are almost nonexistent on a current basis. Some data are available from Internal Revenue Service with several years lag. The most important of these industrial areas are retail and wholesale trade and nonrail transportation, especially trucking.

The present annual reporting program of the Census Bureau for State and local government activities needs strengthening. Annual data for certain of these types of governments not adequately covered now—e. g., counties, school districts—are badly needed. Information on liquid assets held by State and local governments would be extremely useful.

It would also be desirable to have information on the size, growth, and distribution of assets and investment activity of personal trust funds, private pension funds, and nonprofit corporations and organizations.

The inclusion of a sample of State and local governments in the "Treasury Survey of Ownership of United States Government Securities," which now covers 7,500 banks and 900 insurance companies, would permit a more complete breakdown of holdings of Government securities and would greatly increase the value of the survey.

A quarterly reconciliation between the personal savings and liquid savings measures compiled by the Department of Commerce and the SEC, respectively, should be developed and published, perhaps in less detail than is now given annually but with sufficient information to enable users to understand the differences between these two important series. Such a reconciliation would require the compilation of certain additional quarterly statistics.

Farm income

It would be desirable to have net farm income figures by States on an annual basis. At present such figures are prepared only on a United States total basis.

The monthly estimates of volume of marketings, which form the basis for estimates of farm income, are subject to large revisions, and could well be strengthened.

Construction, real estate, and mortgage finance

Good measures of construction costs, now available for very few types of work or structures, would be of great value in analysis of construction developments. Better measures of the volume of expenditures for repair, modernization, etc., of real property would also be helpful.

Better measures and descriptions of the housing inventory and of the living arrangements of households, families, and individuals, and changes therein, in-

cluding migration, and also of the number, character, and location of residential vacancies, and changes in these, would be advantageous. Information on rents being asked for vacant dwelling units as distinct from rents currently being paid for occupied units would be useful in throwing light on changes in rental markets.

Improved measures of the amount and character of mortgage debt and gross changes therein by type of borrower, type of property, and type of lender are required for current analysis, as are more adequate measures of current obligations on debt outstanding and terms of new debt written. Frequent measures of purchases and sales of houses—old and new—and the amount and type of mortgage lending associated with each would also be of great value.

Foreign-trade statistics

More rapid publication of monthly export and import statistics is much needed for timely analysis of economic developments in the United States and of business conditions in foreign countries, as well as for estimation and interpretation of the balance of international payments. This comment refers not only to the aggregate totals and the country and commodity details, but also to the country-commodity subdetails.

Interpretation of movements in the aggregate totals would be facilitated, in the interval between their release and the publication of country and commodity details, by special early releases of important fluctuating items, as was done for coffee imports several months this year.

Gross national product

Improvement of the less reliable elements in the data upon which current quarterly estimates of gross national product depend is desirable, and in proposing improvements of data on sales and inventories, the contribution which these changes would make toward increasing the reliability of initial estimates of gross national product is an important consideration. Some important areas in which improvement would be desirable are the following: (1) reintroduction of a current, quarterly series on producers' durable equipment based upon shipments data—with detail on shipments by type of equipment available currently if possible; (2) improvement in initial estimates of inventory change; and (3) strengthening the statistical basis of current quarterly estimates of consumer purchases of goods and services by type, particularly services.

Quarterly publication of data on deflated gross national product by the Department of Commerce would be helpful.

Consumer intentions

Information on consumer plans and attitudes, collected in the Board's Surveys of Consumer Finances, has contributed materially to an understanding of the nature of consumer demands, and there has been some sentiment for making such studies more frequently than once a year. This type of information has not been fully tested in periods of diverse economic conditions and its diagnostic and prognostic value in various types of circumstances is not known. However, experimentation in this area of consumer data should be continued and possibly extended.

Consumer credit

Sales finance and consumer finance companies represent the most important types of financial institutions dealing in consumer credit for which complete information is not available regularly. The last benchmark on installment receivables of these companies was obtained in connection with the Regulation W registration in 1950. Benchmarks for this area should be obtained periodically, say every 3 to 5 years.

Banking statistics

More adequate statistics providing industrial breakdowns of bank loans outstanding would be desirable. Also, there is need for better information on the ownership and use of bank deposits.

While asset and deposit data are reported weekly for an adequate sample of city banks, current information on the loan and deposit trends of country banks is inadequate. Our banking information would be improved if a weekly series for a sample of country banks could be developed.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM,
DIVISION OF RESEARCH AND STATISTICS.

JUNE 15, 1954.

UNITED STATES DEPARTMENT OF AGRICULTURE,
AGRICULTURAL MARKETING SERVICE,
Washington, D. C., May 21, 1954.

MR. STUART A. RICE,
Assistant Director for Statistical Standards, Bureau of the Budget,
Executive Office of the President, Washington, D. C.

DEAR MR. RICE: In response to your letter of May 10, 1954, we have contacted all of the agencies in the Department concerned with our statistical program to acquaint them with the request of Congressman Talle. Attached is a summary of the comments which we have received on the basis of a rather hurried survey.

All of the comments and recommendations included in the attached report appear worthwhile. We expect to give them careful consideration in connection with planning our statistical program, although in the limited time that we have had, it has not been possible to assess the relative importance of each section or to assign priorities which should be given the various proposals.

In general, we wish to emphasize three points that are being given special attention in connection with strengthening our statistical work, and particularly the existing series which are widely used: (1) Increased accuracy of statistics; (2) greater timeliness in the release of information; and (3) extension of the scope of our statistical work to areas not adequately covered by existing series, including revisions of existing series to increase their usefulness.

We shall be glad to work further with your staff and with the Statistics Subcommittee of the Joint Committee on the Economic Report to review our statistical program and to determine what improvements are most needed.

Sincerely yours,

O. V. WELLS, *Administrator.*

COMMENTS ON IMPROVEMENTS NEEDED IN PROGRAM FOR AGRICULTURAL STATISTICS

A. GENERAL COMMENTS REGARDING ACCURACY, TIMELINESS, AND USEFULNESS OF EXISTING STATISTICAL SERIES

The statistical work of the Department is generally considered to be competent, unbiased, and of serviceable accuracy. Yet the rapid changes that have taken place and are taking place in production and marketing of agricultural products, and the significance of agriculture in the economy of the Nation and the world, confront us with demands for more accurate, more timely, and more useful statistics.

Every effort has been made in our statistical work to provide the subject matter coverage and the detail needed, consistent with available funds. To keep pace with the demand for greater accuracy, we need to give greater emphasis to research on and the making of technical improvements in the procedures for collecting, compiling, and analyzing statistical data. Many new statistical techniques and principles have been developed during the past decade on a laboratory or theoretical basis which are potentially very useful in practice. Studies and trials with the application of new techniques are needed. Sources of error need to be evaluated and corrective action taken where possible in order to improve accuracy.

A program of research and development for improvement of the methods employed in making crop and livestock estimates has just gotten underway. This is an extremely important program and needs to be strengthened and expanded if the Agricultural Estimating Service is to keep pace with the demands for greater precision in the estimates provided. A similar program for improvement of data collecting and compilation procedures needs to be developed in other areas, including market news statistical data, procedures used in the inspection and grading of agricultural products, farm population, and farm labor statistics, and statistics on stocks in storage, to mention only a few important areas.

In addition, the timeliness of crop and livestock reports should be improved. There is need for speeding up the release of the regular monthly reports and provision should be made for more frequent reports, particularly on some of the major crop and livestock products.

In view of the rapidly changing pattern of production and marketing, a continuing review is required to keep abreast of the changing needs for statistical data. We have regular consultation with various commodity advisory groups, and encourage them to review our statistical work. Under the provisions of

the Research and Marketing Act of 1946, 27 commodity, functional, and State agency advisory groups have been appointed and have annual meetings to review and make recommendations regarding the statistical and research programs. Important improvements in subject matter coverage resulting from the RMA committee recommendations include—

(*a*) quarterly cattle-on-feed reports in important States,

(*b*) weekly broiler chick placement reports in commercial areas,

(*c*) development of improved commercial vegetable statistics to include acreage and production in local market areas, and an

(*d*) expanded program of turkey statistics, providing additional reports and separate estimates by light and heavy breeds.

B. IMPROVEMENTS IN THE PARITY INDEX AND THE INDEX OF PRICES RECEIVED BY FARMERS

Among the most important statistical series of the Department of Agriculture are those dealing with prices received by farmers and prices paid by farmers. These indexes are constantly used as a guide to farm policies and programs. The Parity Index (i. e., the index of prices paid by farmers including interest, taxes and wage rates) is used in calculating parity prices of farm commodities, which in turn are used to determine levels of price supports.

It is extremely important, both to the farmer and to the Government, that these indexes be as accurate as we can possibly make them. Any error will affect the income of farmers and also the amount of money spent by the Government to carry out support operations.

With respect to prices of commodities commonly bought by farmers, the present mailed inquiry gives reasonably satisfactory results for standard commodities bought through established outlets. However, many commodities important in the farm economy are bought in many grades, quantities, sizes, etc., sometimes at greatly varying prices, and through several different types of retail outlets. The effects of such factors cannot be properly evaluated from an uncontrolled mailed survey, and different techniques, notably enumeration, need to be applied if more accurate levels of prices paid by farmers are to be obtained.

In addition to the basic problem mentioned above, there are two major deficiencies in the Parity Index (index of prices paid by farmers, including interest, taxes, and wage rates) which should be corrected as early as practicable, namely: (1) The fact that the most recent weights used in the index relate to 1937–41, a period which is more than a decade and one world war in the past; (2) incomplete coverage of prices paid items, more particularly, the lack of a component to represent prices paid by farmers for medical, dental, and hospital services and of components to represent certain other types of expenditures which collectively are far from negligible.

It is important that the weighting pattern of the Parity Index be brought up to date. For this purpose, there is needed a national survey of farmers' buying practices and expenditure patterns, covering both items bought for living purposes and those bought for use in production Once such a general survey is made, there should be continuing spot or sample surveys to disclose changes as they occur.

In addition to providing modern weights for the Parity Index, the data obtained from such a survey would be used by the Farm Population and Rural Life Branch (AMS) in making analyses of levels of living of farm-operator and farm-laborer families. The data would provide producers and processors of agricultural products, businessmen, and economists with information on the potential market for consumer goods of the farm population.

Moreover, in view of the importance of medical expenditures, it is our belief that an annual survey should be made to secure prices in this important segment of farm expenditures. We recommend an enumerative sampling of doctors, dentists, and hospitals on a rather wide scale basis once a year.

In the prices received field, the primary current need is for additional detailed data by grade, class, point, and method of sale. Most reporters are now asked to estimate the composite average price received by farmers in their locality for all kinds and grades of a commodity being sold at the specified date. For some purposes, a reported average of this type is satisfactory, but with the increasing demands for more precision it is necessary that we break the reports down into more detail and compute the composite average rather than expect reporters to do it. Limited steps in this direction that have been undertaken within current facilities have proved very encouraging. Additional facilities are needed to

expand this type of work. For a number of commodities an enumerative survey designed to include a cross section of all sales of the commodity is needed to obtain the needed precision in the estimate. Facilities should be made available to expand the current enumerative surveys, now very limited in scope, to all States and to start new surveys on additional commodities where needed.

C. NATIONWIDE SURVEY OF CONSUMER INCOMES, EXPENDITURES, AND SAVINGS

We need information on postwar patterns of incomes, expenditures, and savings and the purchasing power of the different groups in the Nation. The last complete survey in this respect was the 1935–36 survey of consumer purchases. (There was a small nationwide survey in 1942 which because of its small sample was of limited value.) The Department has a direct interest in a nationwide survey from the following viewpoints:

1. It would provide information on the consumption and expenditures for the various foods and other products involving the use of agricultural commodities, by population groups, income levels, geographic locations, sizes of family, and other factors causing differences in expenditure and consumption patterns. This would enable a much more accurate appraisal than is now available of the current domestic requirements for farm products and the potential demand for food and other products as population and incomes continue to grow. Furthermore, such statistical information would be extremely valuable in developing and operating programs for the elimination and proper disposition of surpluses of farm products.

2. It would make possible the development of income size distributions in agriculture and the levels of living associated with income levels for farm groups as well as similar information for nonfarm groups, thus enabling a better evaluation of the "income parity" position of agriculture. In addition, such information if obtained in geographic detail would answer questions on who and where the low-income families are and provide a statistical base for developing a program to alleviate the low-income and poverty problem. Farm families make up a substantial part of the low-income group.

3. It would provide data on farm purchases (both for production and for family living) which would be useful in developing postwar quantity weights for the parity index, which was discussed in section B.

4. The data obtained from such a survey would be used by the Home Economics Research Branch (ARS) in deriving family budgets for home management, education, and research use.

D. SURVEYS OF FOOD CONSUMPTION AND DIETARY ADEQUACY

Periodic surveys are needed to provide up-to-date information on food consumption and family food patterns of groups in the population and to show the extent to which diets in this country meet nutritional recommendations. These surveys locate the groups whose diets are most in need of improvement, show possibilities of expanding food markets, and provide direction for educational programs. The last such survey on a nationwide basis was made in 1942. The urban population was covered in 1948, and portions of the rural population in 1948 and 1950. A survey is needed in the near future to cover the entire population and to take account of changed price and income relationships and changes in the forms in which food is marketed.

The national surveys should be supplemented from time to time by small-scale surveys directed at certain population groups or dealing with important problems in the interpretation of food consumption data. For example, intensive research is needed to determine the kinds and magnitudes of losses occurring from the time food is marketed until it is eaten. Neither the supply nor the family purchase data can be correctly interpreted in terms of nutritional needs without quantitative estimates of losses in marketing and in food preparation. Therefore, two types or research are proposed:

1. A study in a selected community of supplies, distribution, consumption, and use of food. This would provide estimates of the kinds and quantities of foods coming into the community at the retail level and the losses in marketing. It would also supply data on consumption of food in the home, in restaurants, and in institutions, and would provide measures of losses of food materials and nutrients occurring during food preparation and cooking, through plate waste and spoilage.

2. Surveys of representative samples of the population to determine the ways foods are used in homes and institutions with special attention to foods that have several uses (e. g., eggs) or share uses (e. g., fats), to waste and spoilage, and to practices that affect the nutritive value of foods as eaten.

We have had considerable experience during the past several years, under a research contract, in obtaining data on citrus products consumed in households from a consumer panel diary, based on a diary recording of purchases. More recently additional work has been started to obtain diary data on consumption of selected dairy products and margarine. This experience suggests the desirability of obtaining further data from the consumer panel approach in order to provide timely detailed information on current changes and trends in food consumption.

E. FARM INCOME ESTIMATES

Farm income estimates are the best overall measure of the economic status of farm people. They provide a base for the appraisal of the impact of economic changes on agriculture and for the development and operation of farm programs. Furthermore, estimates of State net farm income enable the location of areas of weakness or strength in the farm income picture.

The technological revolution in agriculture in the last 15 years has resulted in many new products purchased by farmers for production purposes and a high cash cost structure in farming. It is important that these changes be adequately reflected in the estimates of farmers' incomes and expenses. Annual State estimates of net income were discontinued in 1945, largely because of insufficient funds to carry on the work adequately.

Sufficient funds will be available in fiscal 1955 to develop much more satisfactory estimates of production expenses and to permit the reestablishment of State net income estimates. A survey such as described in section B would provide much of the material needed to make more accurate estimates of farm expenses and of net farm income. Even so, in view of the dynamic changes that are continuing in agriculture, it will be necessary to make further significant improvements in farm income measurement in the years ahead.

F. STATISTICAL INFORMATION RELATED TO THE MARKETING OF FARM PRODUCTS

1. Farm-to-retail price spreads and farmer's shares are calculated for a market basket of farm food products, food commodity groups, and almost 50 individual food products, and for cotton products and tobacco products. These series are published regularly in the Marketing and Transportation Situation, a quarterly publication of the Agricultural Marketing Service. No data are collected by the AMS specifically for these continuing price-spread series. These statistics are computed mainly from average retail and farm prices that are collected in connection with the various price indexes of the Bureau of Labor Statistics and AMS.

The price data available from these indexes are not fully satisfactory for computing price-spread series that will provide accurate factual information covering a wide range of farm products. The principal improvements needed are retail prices for a larger number of commodities and, in the case of some priced commodities, more information on various grades and sizes. For several commodities, corresponding information is needed on the farm level because the average price received by farmers often reflects changes in quality, proportions of different grades sold, variations in marketing practices, and other factors that may not be represented in the reported retail prices. Beef is a noteworthy example. Retail prices of three Choice grade carcass cuts (which are available from the BLS index) are insufficient to estimate reliably the average price paid by consumers for all Choice grade beef. The prices received by farmers represent prices for all grades of cattle, including those sold as feeders. Furthermore, there are no retail prices for lower grades of beef except hamburger. During the last several years, marketings of lower grade slaughter cattle increased sharply and the margin for all beef and for these lower grades was often of more interest and significance than that for Choice grade. For example, during the last year the Department spent much time in gathering retail prices and other information for beef in response to requests from congressional committees, producers, and consumers. A more efficient use of resources would result if additional price information were collected on a continuing basis for more food products.

2. Analysis of margins and costs for marketing selected farm products by channels, agencies, and functions

There is need for special margins and costs studies to trace selected products through typical channels to specific markets. During the current year and for succeeding years, the following type of information should be developed: Buying and selling prices of farm products at the different marketing levels; information on types of marketing channels through which farm products are moved, and quantities of products moving through these channels; and information on costs incurred by various marketing agencies in their operations. The information would make possible continuing analyses of the difference between prices received at the farm and prices paid by consumers by market channels and by cost items.

A recurring demand exists for this type of information from agricultural organizations, marketing agencies, Members of Congress, farmers, and consumers. During periods when farm prices are declining and retail prices on food items remain fairly rigid, this demand is particularly intense.

A series of USDA bulletins give some of these data for selected products for 1939. No comparable data for the United States as a whole are available on most products for recent years. The 1939 Censuses of Manufacturers and Business provided much data for developing breakdowns of margins by marketing agencies and functions and by cost items for that year. Census information for a recent year would be most helpful in maintaining these series and providing worthwhile comparisons. The 1947 and 1948 census data were of limited use for studies of this type because no data were collected on costs of goods sold and on the marketing channels used in the distribution of farm products.

G. EXPANDED TRUCK MOVEMENT REPORTING BY FRUIT AND VEGETABLE MARKET NEWS SERVICE

An urgent need for current truck movement data to supplement rail and boat movements has been expressed over the years by various segments of the fruit and vegetable industry, backed by recommendations of three RMA advisory committees within the last 6 months, as well as previous recommendations by various advisory committees. The Fruit and Vegetable Market News Service has reported rail and boat shipments and market receipts for over 35 years. Estimates indicate that from 50 to 60 percent of commercial movements of fruits and vegetables is now by truck, resulting in reduced value to industry of rail and boat data alone. The industry is apparently unanimous that need for the rail and boat data continues but truck data should be added.

Truck shipments are now reported for 4 States and truck receipts in 20 major markets. To round out truck statistics, shipments should be reported in a few additional States where economically practicable and receipt reports expanded to cover around 75 markets, which should represent about 70 to 80 percent of commercial truck movement. Such statistics would be of value currently in day-to-day harvesting and marketing plans and operations and judicious distribution of commodities between markets. Historically and statistically they would be of value in developing long-range production and marketing plans, analysis of market potential, and as check data against other production and marketing statistics. Plans are being developed to expand this work by the Market News Service as rapidly as funds permit.

H. STORAGE STOCKS

Statistics on storage need to be improved and expanded. These data are essential if we are to predicate decisions on agricultural policy on the total supplies available at any particular time. Statistics on cold storage holdings are presently inadequate to meet the needs as are the data on stocks of many of the grains. We now report storage stocks of potatoes only once a year. More frequent information would be very useful to farmers and to dealers, as well as to the Department in its operation of the current section 32 program on potatoes.

I. CROP STATISTICS FOR IRRIGATED AND NONIRRIGATED LAND

The rapid growth of the use of irrigation to increase the productivity of the land and to bring new lands under cultivation has been accompanied by new and urgent demands for separate current statistics on the output of irrigated

and nonirrigated land. These demands come from a wide range of users of agricultural data. Separate estimates on acreage, yield, and production of crops on irrigated and nonirrigated lands by States and counties would greatly increase the usefulness of current crop statistics in evaluating the productive capacity of our lands and in determining future potentialities. The need for such separate estimates is most urgent in the 17 Western States but there is an increasing use of irrigation, in many instances supplementing natural rainfall, in other parts of the country to increase crop production.

Irrigated acreage increased over 43 percent between 1939 and 1949 and has shown further growth since. Census data for 1949 indicate that 94 percent of the irrigated acreage at that time was in the 17 Western States. The development of new and expanding irrigated areas through such projects as the Grand Coulee make it particularly desirable that such separate data be currently available in this western area.

Separate estimates for irrigated and nonirrigated acreages would yield a fuller description of agricultural production while increasing the reliability of the estimates. Great differences in yield per acre, between irrigated and nonirrigated land, varying from year to year, increase forecasting and estimating difficulties in these States. For example, United States census data for 1949 reported that in that year the average yield per acre for farms on which all the crop was irrigated was more than double the yield on nonirrigated land for cotton, alfalfa, and barley and grain sorghums and more than three times the yield for spring wheat, flax, and dry beans. Estimates are most needed for crops having substantial division between irrigated and nonirrigated land.

J. STATISTICS RELATING TO PASTURE PRODUCTION

Adequate measures of pasture output are needed to provide additional basic data relating to the Nation's supply of feed available for the more than 76 million roughage-consuming animal units. The grasslands program has been gaining momentum for more than 5 years, and the contribution made by pastures to the feed resources is becoming increasingly important. In the South, progress reports indicate that pastures have developed faster than any other segment of agriculture. Where only a few years ago it took 5 to 15 acres to support an animal unit, in some cases, there are now numerous examples of less than 1 acre carrying a unit. The future for increasing pasture production is very bright through the use of improved varieties of grass and legume crops, fertilization, irrigation, and good management.

Serviceably accurate estimates are now available for 365 million acres of harvested crops on 5½ million farms and ranches but no objective measures of output are available on more than 1 billion acres of pasture and range land on or used by these farms and ranches. With more than 25 million acres being retired from cotton, wheat, corn, and other crops under allotments in 1954 and possibly future years, more land than ever before will be devoted to improved pastures which, acre for acre, can produce the feed equivalent of some of the best grain and hay crops.

The 5-year Censuses of Agriculture give some information on the acreage in pastures but not in sufficient detail for most users. There are no current year-to-year estimates on pasture acreages. About the only currently available information is the monthly index of pasture "condition as a percent of normal." This is not an adequate measure of potential feed production and its use has been strained as an indicator of pasture productivity. There should be annual estimates of acreage of pasture and range by productive classes, and current measures of grazing output by classes of pastures.

K. STATISTICS ON ACREAGE OF SUMMER FALLOW

In many areas of the Great Plains, intermountain, and Pacific States, a part of the cropland acreage is devoted to summer fallow as a means of storing moisture and controlling weed growth. Yields of wheat or other small grain on summer fallow are frequently nearly double those experienced under continuous cropping. Lack of current estimates of the acreage in summer fallow, therefore, is a significant gap in our information on corp production and use of land in the 17 Western States. Adequate information on summer fallow acreage becomes especially important in consideration of acreage allotments, use of diverted acres, drought problems, etc.

L. FERTILIZER UTILIZATION

The growing concern over the ability of our land to produce sufficient food for the growing population in the years to come and the increased use of various kinds of fertilizers as one means of increasing production brings an ever-widening demand for more adequate statistics on amounts of fertilizer used on different crops and its effect on crop yields.

A large body of data is available relating to fertilizer use and its effects on experimental plots. Series are also available on the production of fertilizer in this country and the overall use of fertilizer by States on a historical basis. More detailed information is needed on current usages by kinds of fertilizer and by crops, as well as the general effect of such fertilizers on yields per acre and production. Such current statistics on plant nutrient uses by kinds and by crops is essential to evaluate satisfactorily current production trends and to estimate the Nation's capacity to produce agricultural products on the land available for agricultural use under maximum or optimum fertilizer application.

Experimental data alone are not sufficient for this purpose although they do provide valuable guides. Responses are often different under general farm conditions than under controlled experiments. Fertilizer purchases have become an increasingly important item in farm expenditures and the cost of producing crops. Current statistics on fertilizer used by kinds, by crops, would be of material help to the Crop Reporting Board in forecasting yield per acre before harvest time. These data on a current basis would also form a valuable basis for weighting prices paid by farmers for various types of fertilizers into an all fertilizer price for use in computing the parity index, on which support prices to farmers for various commodities are based.

Although current statistics on overall fertilizer use by crops, by States, would help to fill many existing gaps in fertilizer statistics, the trend toward higher-analysis mixed fertilizers and the use of liquid carriers for applying plant nutrients points to the further need of collecting statistics not only by kinds and crops but on the basis of fertilizer units applied per acre.

M. NON-REAL-ESTATE DEBT OF MISCELLANEOUS LENDERS AND CREDITORS

Many agricultural operations are financed with short-term, non-real-estate credit. In recent years the non-real-estate debt of farmers has exceeded their farm-mortgage debt. The amount of debt held by banks and federally sponsored lenders is reported semiannually or more often. No data are regularly available from other lenders and creditors such as merchants, dealers, and individuals who are believed to hold nearly half the total non-real-estate farm debt. This large segment of the debt is very volatile and at times it has been the basis for much credit distress. The lack of data on miscellaneous lenders has long been recognized as a handicap in measuring and appraising the debt situation of farmers. As recently as March 19, 1954, the Agricultural Commission of the American Bankers Association passed a resolution calling this situation to the attention of the Federal Reserve banks with the recommendation that they attempt to develop a current reporting service to supply such data.

N. SEMIANNUAL SURVEY OF THE FINANCIAL AND CREDIT SITUATION IN AGRICULTURE

The purpose of surveying farmers and creditors periodically would be to recognize any troublesome—or potentially troublesome—situation before widespread foreclosures or property liquidations occurred. Although data are regularly available on prices and income, the effect of changes in these factors on the credit and financial condition of farmers is not fully known. There is much variation among individual farmers and among areas in the ability to withstand adverse conditions. Information to be obtained from the proposed survey would cover by areas such factors as: Demand for, and availability of, credit; changes in volume of debt; extent of extensions, delinquencies, and foreclosures; and extent of depletion of physical and financial resources. The Agricultural Commission of the American Bankers Association passed a resolution at its last annual meeting calling upon the Agricultural Research Service to assume the leadership in developing this type of survey information.

O. FARM COST AND RETURN DATA FOR IMPORTANT TYPES OF FARMS

Current and up-to-date measures of farm costs and returns for the major types of farming situations in the United States are of great importance because

of widely differential rates of technological development and changes in commodity prices and yield. In legislative policy and program decisions relating to agriculture it is of vital importance to have adequate information on the cost and income situation for the major farm situations in the United States. The Production Economics Research Advisory Committee recently recommended: "Additional series for the following types of farms are needed: Cotton farms in the South and irrigated areas of the Southwest; irrigated farms in the intermountain region; general farms in the transition zone between the Cotton Belt and the Corn Belt; and poultry farms in the east."

P. CHANGES IN AGRICULTURAL INPUTS AND PRODUCTIVITY BY REGIONS AND COMMODITIES

Measures of the changes in the quantities of various resource services used in American agriculture have thus far been limited to a United States basis. With the rapid changes in agricultural technology, measurement of the quantities of various types of resource services used in agriculture are of fundamental importance to understanding of basic developments in American agriculture. These developments vary widely among regions and commodities. This work needs to be expanded to include area, State, regional, and commodity bases. Changes in inputs are of special interest to Extension Service, farm leaders, and industrial concerns producing products used in American agriculture. Measurement of productivity changes are also of basic importance in the formulation of agricultural policy. Development of these measures is dependent on the assembly of adequate input information.

Some specific types of information for which improvement and wider coverage are needed both from the input and other standpoints are as follows:

1. Number of tractors and other important machines.
2. Associated machinery inputs (gasoline, oil, etc.).
3. Fertilizer and lime.
4. Other chemicals and related products—insecticides, weed killers, hormones, etc.
5. Feed, livestock, and seed purchases.
6. Other important farm production supplies.
7. Labor inputs.

Q. FARM POPULATION AND EMPLOYMENT

1. Farm population estimates

In order to increase the reliability of the annual estimates of United States total farm population and of its characteristics by age, sex, labor-force status, etc., developed cooperatively with the Bureau of the Census, the sample of the Current Population Survey should be expanded. Reliability of the Agricultural Marketing Service estimates of farm population for geographic areas and migration to and from farms would be increased as the reliability of the United States total farm population estimates is increased. This would be particularly true if the sample could be expanded enough so that regional totals could be obtained from the current population survey data.

Farm population estimates are widely used throughout the Department of Agriculture, by other Federal agencies, and public and private agencies outside the United States Government. Per capita farm income estimates used in parity analyses, per capita consumption statistics, and many other indexes are based on the farm population estimates. Direct and indirect measures of population pressures and in the farm labor supply for other than decennial census dates depend on the annual farm population estimates.

2. Vital statistics of the farm population

It is understood that consideration is currently being given to revision of the standard certificates of death and live births (Forms PHS–798 (VS) and PHS–796) recommended by the National Office of Vital Statistics, Public Health Service, for use by the various States. There has been a long-standing need for inclusion on these forms of a question relating to farm residence. Data on deaths by farm residence would permit analyses of mortality of farm people and the construction of life tables for the farm population. One use of the latter would be to develop more accurate measurement of the net movement of people to and from farms. Valuable comparisons could be made between the causes of death of farm people as compared with those of nonfarm people. Perhaps the primary utility of birth statistics for farm residents would be in the

currently difficult job of preparing annual estimates of the size of the farm population. In conjunction with the death statistics, the birth data would also be used to analyze the incidence and nature of infant mortality among the farm population. Current supposition is that infant mortality rates are higher among the farm population than among any other residence group of the national population but no data have hitherto been available. We should like to urge a simple question on farm residence be added to the birth and death registration forms.

3. Farm employment and wage rates

Farm employment data should be expanded to provide reliable estimates by States. Work and necessary resources should be devoted to the development of a single series on agricultural employment, utilizing the Department of Commerce series at the national level, and that of the Department of Agriculture for State and regional estimates. Technical work should be invested in working out the problems of integration of the two sets of data to be issued on a cooperative basis.

More comprehensive and accurate statistics are needed on wage rates paid to farm labor broken down to show payments by kind of job performed and the value of housing, food, and other allowances provided to farm labor.

4. Levels of living of rural families

Data on levels of living of rural families need to be collected more frequently than in the censuses of agriculture and on a wide number of items. Also, data are needed on the adequacy of various services available to rural people, including health, library, telephone, and other types of services. Such data would provide the basis for appraising the differing rates of progress among areas of the country in improving conditions of rural life.

B. STATISTICS RELATING TO FOREST PRODUCTS AND THEIR USE

1. Facts for industry series, M13G, lumber production and mill stocks

The collection and publication of lumber production statistics is a long-established program of the Bureau of the Census. Complete statistics are available periodically by species and States. In some years, however, and particularly in recent years, intensity of coverage has been reduced with the result that local statistics are available only for the more important producing States and estimates are subject to larger sampling errors.

Lumbering has long been an important industry in all sections of the country and more timber is cut for lumber than for all other forest products combined. Thus, more complete statistics on production by species and States are needed annually as a planning aid to Federal and State agencies, forest industries, and forest landowners concerned with specific problems of timber supply.

2. Facts for industry series M13A, hardwood veneer and plywood

Periodically the census has collected statistics on the production of hardwood veneer and plywood and log consumption. In the years 1942 through 1945 and since 1951 such a survey (series M13A) has been conducted. In conducting these surveys, the census has collected data from every producing plant. At the present time it is understood that the program is sponsored by Business Defense and Services Administration in the Department of Commerce but may be discontinued.

Information on hardwood veneer and plywood production and log consumption is of considerable value to Government and industry. Data on log consumption is of particular value to the Forest Survey. Since hardwood veneer logs are moved long distances to manufacturing centers, it would be useful to expand the census program to obtain data on long consumption by species and by State of foreign origin of logs consumed.

3. Construction activity

Monthly estimates of total construction activities are issued jointly by the Departments of Commerce and Labor. The construction industry is a major consumer of forest products as well as other raw materials and information on construction activity and materials used is therefore of large importance to various industries and public agencies. It is believed that coverage of the construction industry should be expanded and strengthened.

The segment of construction activity dealing with housing starts is cited as a case in point. A wide disparity exists between the number of dwelling units

started as reported by the Bureau of Labor Statistics and the number of dwelling units added to the housing inventory in different periods as shown by the census of housing. Better coordination of programs, including definitions and concepts, and a more comprehensive survey by BLS appears necessary to achieve needed improvement of current statistics on nonfarm residential construction.

S. CENSUSES OF AGRICULTURE, MANUFACTURES, BUSINESS, AND TRANSPORTATION

The Department of Agriculture has a keen interest in the outcome of pending legislation on the proposed censuses. Information obtained in the census of agriculture provides the basic data or benchmarks upon which the Crop and Livestock Reporting Service and many other statistical and research activities of the Department depend. Rapid changes that have taken place since the last census, and the urgency and importance of the problems arising therefrom, make it imperative that a census be taken covering the basic data on which many decisions, both governmental and private, are dependent. There is a heavy demand for periodic agricultural statistics by counties or by other small areas which can be met, for the most part, only through a complete agricultural census.

The census of manufactures is an important and often the only source of information on the utilization by groups of industries of major agricultural commodities and is the only reliable source of data on the production of many important food and nonfood products. The census of business provides information about the channels of distribution through which food and many nonfood commodities flow to the ultimate consumer, and the type of outlet. The development and expansion of markets for agricultural products and research for that purpose can be carried out much more effectively if basic data on the transportation industry, as would be provided by a census of transportation, are available. Thus, as the Department of Agriculture has stated on previous occasions, we sincerely hope that the Congress will appropriate funds for the proposed censuses.

T. SAMPLE CENSUS OF AGRICULTURE

Considerable thought has been given in recent years to beginning periodic sample surveys of agriculture. Various alternative plans have been discussed. In lieu of the continuation of the complete agricultural census every 5 years, one plan which offers some advantages is a biennial sample census, together with a complete agricultural census every 10 years. The biennial sample censuses should be large enough to assure statistical reliability of national and State estimates for the items covered. The general idea has been to try developing a program of sample censuses which over a decade would be more useful and would not exceed the cost of the census which it replaces.

There has been considerable criticism of the census of agriculture in the past because of limited coverage of general economic items owing to limitations of length of schedule. The principal advantage of the biennial sample plan would be provision for increasing the scope of the information obtained over a decade by using a different schedule, at least in part, for each survey. Thus, by rotation of questions asked, the subject matter coverage could be extended to include a number of additional subjects. The biennial survey could serve as a basis for obtaining parts of the information discussed in other sections of this report and could fill a number of other miscellaneous but important gaps. Among the many subjects either not covered or covered to only a very limited degree are:

1. Land use—an inventory of land used for crops, pasture, woodlots, summer fallow, and other purposes.
2. Production practices—including conservation practices, use of fertilizer, pesticides and insecticides, chemicals and weed control.
3. Farm machinery equipment.
4. Marketing practices.
5. Materials used in construction of farm buildings.
6. Breeds and classes of livestock and crop varieties.
7. Farm accidents.
8. Farm storage facilities.

U. FOREIGN TRADE AND AGRICULTURAL PRODUCTION IN FOREIGN COUNTRIES

With limited personnel in the Foreign Agricultural Service and in the Foreign Service, it has been possible to assemble and publish only a fraction of the statistical information needed to provide a reasonably adequate picture of over-

seas developments in agriculture. Interested commodity groups in the United States have only a portion of their needs provided by this service.

1. World summaries of area, yield and production of crops are made for principal commodities two or three times a year. This is a partial service reasonably satisfactory to the commodity interests in the United States, though as a general rule the first reports are not issued at a sufficiently early date in any season.

2. Annual reports on livestock numbers reflect in a general way the overall trends of such numbers, and incomplete information is published on production of meat, dairy products, poultry products, and wool, but only for a few foreign countries. More frequent and timely information for a greater number of countries is needed to serve the interests of livestock groups in the United States.

3. Information on consumption of agricultural products in foreign countries is available for many European countries and Canada, but reliable information for other parts of the world is scant.

4. Wholesale price information at present is limited to a few series on cotton, wheat, corn, and dairy products. More commodities need to be covered and quotations need to be made available more frequently.

5. Carryover stocks are available annually for cotton, for the principal grains in important countries, and for a scattering of other commodities. In view of the important role played by stocks in price determinations, new series need to be developed on many commodities produced abroad which compete with exports from the United States.

6. The entire field of reporting upon market developments day by day and week by week in foreign countries is carried on on a very inadequate basis. In many cases entirely new series of information need to be developed.

The Department of Agriculture also uses information collected by the Foreign Trade Division of the Bureau of the Census.

Since July 1, 1953, the Bureau of the Census has estimated the quantity and value of low-value exports (having a declared value of $500 or less) on the basis of a 10-percent sample. Agriculture is interested largely in the agricultural commodities. It is as much, if not more, interested in the destination of agricultural exports. Under the sampling system an overall estimate for an entire year probably is reasonably indicative of the quantity and value of these low-value exports. However, when such estimates are made for individual countries of destination, or for a month, the probabilities of error are very large and the resulting estimates cannot be used with confidence. We recommend that steps be taken to resume the tabulation and publication of monthly data by country of destination.

Beginning January 1, 1954, similar sampling, in this case of 5 percent, is taken of imports with a value of $200 or less. The Department of Agriculture is frequently interested in the origin of these small-value imports and recommends the resumption of tabulation and publication of full details.

DEPARTMENT OF COMMERCE,
BUREAU OF THE CENSUS,
OFFICE OF THE DIRECTOR,
Washington, D. C., May 21, 1954

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Assistant Director for Statistical Standards,
Bureau of the Budget,
Executive Office of the President, Washington, D. C.

DEAR MR. RICE: This is in reply to your request of May 10 for comments on improvements in statistical programs for use in preparing a report to the Statistical Subcommittee of the Joint Committee on the Economic Report. The comments of the Bureau of the Census are based largely on the recommendations embodied in the recent report entitled "Appraisal of Census Programs" made by the Intensive Review Committee to the Secretary of Commerce. A copy of the Intensive Review Committee's report is enclosed. The following comments represent a selection, with some amplifications and additions, of those recommendations which we feel are particularly pertinent to the interests of the Statistical Subcommittee.

Major censuses

The greatest concern expressed by the Intensive Review Committee was over the failure in recent years to provide appropriated funds for the preparation or conduct of regularly scheduled and authorized major censuses. Among these are the census of governments for 1952, the censuses of mineral industries for both 1948 and 1953, the census of manufactures for 1953, the census of business (retail, wholesale, and service trades) for 1953, and the census of agriculture for 1954. The Intensive Review Committee, noting this "disturbing retrogression," commented that "strenuous efforts will be required if the damage done is to be repaired." Specifically, in its recommendations Nos. 6, 13, 20, and 24, the Intensive Review Committee urged that the census of agriculture be taken in the fall of 1954 as originally scheduled, and the censuses of mineral industries, manufactures, and business be taken in 1955 covering 1954 data. The Bureau regards these censuses as the essential foundation for recreating an adequate statistical program.

In connection with the census of manufactures and related statistical undertakings, more attention should be given, as the Intensive Review Committee recommends, to providing expanded data on processes employed and materials used, and to providing, where practicable, for the presentation of data for individual industries and product classes in the most meaningful manner possible.

In connection with the census of business, the Bureau recommends that adequate funds be provided to continue the retail merchandise line data, to provide new data on the extent and type of capital expenditures by trade and service businesses, and to expand the coverage of service trades to include nursing, convalescent, and related types of institutions.

Departing somewhat from the recommendations of the Intensive Review Committee, the Bureau is hoping to secure approval for a sample survey of governments to be taken in 1956 to cover the year 1955. The next complete census of governments would then be taken in 1958 to cover the year 1957, in accord with present law. This census covering 1957 would establish new benchmarks and provide vital information that has not been available since 1942, as noted by the Intensive Review Committee. The recommendation of that Committee was that this complete census should be taken in 1956 to cover the year 1955, but the difficulty of securing the necessary legislation from Congress for this departure from established schedule makes the proposed adjustment more feasible.

No specific recommendations are made at this time regarding the census of transportation, which was authorized for 1948 and 1953 but for which funds were not provided. In accordance with the Intensive Review Committee's suggestion, the Transportation Council of the Department of Commerce has been asked to explore further the need for a census of transportation and to study the feasibility of various means of filling the gaps in the transportation statistics field. The Bureau believes that this study will lead to endorsement of a number of projects which have been outlined.

Current programs

Population.—Some improvement is desirable in the Bureau's monthly current population survey, especially with respect to the significant data it provides on labor force, employment, and unemployment. The Intensive Review Committee noted that "it is important to strengthen the monthly labor force sample to insure its greater sensitivity and representative national character." Specific recommendations on increasing the size of the sample, expanding quality checks, and other matters, are expected to come to head shortly, in the report of the Secretary's Special Advisory Committee on Employment Statistics.

The group of specific recommendations by the Bureau shown directly below reflect largely certain weaknesses in the Federal statistics program noted by the Joint Committee on the Economic Report in its report on the January 1954 Economic Report of the President.

1. Expanded research is necessary into causes of differences between establishment and population statistics on agricultural and nonagricultural employment at different seasons of the year. A program of special surveys drawn up by the Bureau in connection with its current population survey has had to be deferred because of lack of funds. It included studies of payroll samples to determine response errors and of special types of workers that may not be adequately reflected in establishment reports.

2. Further research should be made into the relation of measures of unemployed persons through population surveys and through the records of the unemployment compensation system.

3. Sample surveys of important labor market areas should be undertaken to determine the incidence of unemployment by area and the characteristics of the unemployed.

4. The information on the employment and unemployment of family heads, now available only annually, should be provided monthly or quarterly.

5. The former monthly publication, from the current population survey, of statistics on gross changes (entrants and withdrawals) in the labor force, should be resumed.

6. Existing measures of seasonal variation in the labor force and its components should be revised.

7. There should be developed monthly figures on changes in consumer income, savings, expenditures for major items, and expenditure plans.

8. A study of low-income families is required to determine what proportion are in the chronically low-income group and to determine the effect of factors such as changes in family composition, age, disability, etc.

In the field of current estimates of the size of the population, the Bureau publishes annual estimates by States for several broad age groups. These official estimates are widely used. However, they are somewhat deficient in quality because of the indirect nature of the available evidence on the net interstate migration of adults. Further, there have long been insistent demands for current estimates for metropolitan areas and at least the larger counties and cities, which the present data fail to provide. Negotiations with the Bureau of Old-Age and Survivors Insurance have established that the population estimates can be improved and extended by making use of data now in the records of that agency. Still further improvements and extensions would be made possible by proposed extensions of social-security coverage and the proposed integration of certain Internal Revenue Service records with those of BOASI. To accomplish the improvements would require the financing of special tabulations at BOASI and a statistical processing work at the Bureau of the Census.

Agriculture.—The Bureau hopes to follow the recommendation of the Intensive Review Committee that legislation be enacted to supplant, beginning in the decade of the 1960's, the middecade census of agriculture by less costly and more current biennial sample censuses for the crop years ending in 1, 3, 5, and 7, and restricted sample surveys for the years ending in 0, 2, 4, 6, and 8. (The regular decennial census would cover the crop years ending in 9.)

Housing and construction.—Following the recommendations of the Intensive Review Committee and other groups, and reflecting their concern over the absence of housing data between decennial censuses, the Bureau is planning to propose for budgetary consideration for fiscal 1956 a survey of housing characteristics, including also inquiries on consumer income and other population data, to provide national totals and separate data for 40 metropolitan areas.

Improvement and expansion of statistics in four other major areas of the housing and construction field are being studied under a special program sponsored by the Secretary of Commerce and recommended by the Intensive Review Committee. The following subjects, on which data are not now available, are being investigated:

1. Alterations and repairs: Quarterly data on expenditures and repairs ("fix-up") on residential, commercial, industrial, and State and local government properties. (See also under "Governments.")

2. Vacancies: Semiannual rates and characteristics of residential vacancies.

3. Building materials production: Monthly data on quantity and value of production of major building materials.

4. New nonresidential construction: Quarterly data on new construction by State and local governments. (See also under "Governments.")

Manufactures.—The Bureau strongly favors, as recommended by the Intensive Review Committee, including the annual sample survey of manufactures in the Bureau's budget as a regular function. The survey should be strengthened to include more industries of special mobilization significance on a 100-percent enumeration basis, and the funds provided should be adequate to achieve a greater timeliness in the publication of results and to allow for testing and improvement of sampling techniques. The annual survey should collect additional information on materials consumed in manufacture. The 1953 survey includes inquiries on metals consumed and on industrial water use. Other im-

portant materials which might be covered include lumber, paper, sugar, flour, and selected chemicals.

The Bureau wishes to maintain and improve its current commodity surveys (usually published in the Facts for Industry series) with emphasis on improving the timeliness and scope of those series. Reductions in appropriations have made it necessary to drop some series and to reduce others in frequency or content.

The Bureau sympathizes to some extent with a feeling in the textile and apparel industries that recent curtailments in the program for those areas should be restored. Other commodity fields in which expanded scope is desirable include fats and oils as used in animal feeds, metal fabricating (especially bearings, pumps, compressors, elevators and escalators, and electrical equipment), drugs and insecticides, cosmetics, petroleum, food products, wood and converted paper products, and wooden containers.

Business.—As recommended by the Intensive Review Committee, the Bureau hopes to push to completion its objective to develop suitable monthly inventory figures for types of stores not covered by the Federal Reserve Board program. Exploratory work is being done during the present fiscal year with one-time "spot-check" funds. The promising results thus far obtained indicate that the program can be conducted on a current basis at relatively low cost.

As recommended by the Intensive Review Committee, the annual and monthly wholesale and retail sales reports secured through sampling surveys should be maintained on approximately the present scope and that efforts should be continued to improve the quality and timeliness of these reports. At present, the annual retail and wholesale surveys are being conducted by means of "spot-check" funds. Additional appropriations will be required to continue these in subsequent years. It is important also to conduct a regular annual survey of the service trades, such as has been conducted for the year 1953. There is no monthly or other current measure of receipts for those trades.

With a relatively small expenditure of funds, the current survey operations in the business field could be made to yield important additional data; for example, there has long been an intense interest in the birth, deaths, and growth in the population of retail stores. Such information, classified by business types and size groups, could be produced largely as a byproduct of the present retail survey. Similarly, information on the shifts within metropolitan areas from downtown shopping districts to outlying areas could be measured in aggregate for all metropolitan areas and by city-size groups. A further type of information which can be derived from materials in the present retail sales survey relates to the variability in retail store sales experience. Such an analysis would show the extent of variability and the degree to which sale size, type of operation, and other factors contribute to it.

Foreign trade.—As urged by the Intensive Review Committee, the Bureau hopes to take steps toward carrying out its essential function in meeting public and private needs for statistics on foreign trade. The Intensive Review Committee appraised the present situation as follows: "Nevertheless, the Bureau's foreign trade statistics program has been subjected to continual attrition and erosion over the past 8 years, and a condition approaching crisis has been reached. Funds have been successively reduced while the workload has increased. The result has been successive abandonment of sections of the program and lowering of standards of quality and comprehensiveness." The Intensive Review Committee recommended that the Bureau be enabled to build up its functions in the assembling and publication of foreign trade statistics to a level appropriate to the needs of the world's chief trading nation.

Among the specific improvements deemed necessary by the Bureau are the following:

(*a*) Institution of a monthly and annual shipping statistics publication program. At present, monthly shipping statistics are available for reference use only, in coded form, and are not available for general distribution to port authorities, steamship companies, Government agencies, and others interested in the United States maritime trade.

(*b*) Preparation of a detailed list of items included in the import commodity classification schedule. Such a list is now available for the export classification. A comparable list for imports is needed in order to obtain more accurate information on the source documents filed by importers and to enable users of the data to know the commodities included in the classifications.

(*c*) Preparation of foreign trade statistics in conformity with United Nations recommendations of uniform definitions of value, country, etc.

(*d*) Resumption of more complete compilation of low-value shipments. These data are now available on a summary or sampling basis only, with serious loss of detail and reliability.

(*e*) Preparation of comparable annual commodity statistics for the period from World War II to date. Users of foreign trade data are handicapped by the many commodity changes made since World War II. Every other important trading nation publishes such data on a regular basis.

(*f*) Preparation of comparable commodity data for United States exports and imports and production.

Two recommendations by the Bureau of the Census relating to the work of the Bureau of Foreign Commerce of the Department of Commerce are listed below. The Bureau of the Census would presumably be called on for considerable collaboration on these recommendations.

(*a*) The publication of import and export trade totals on a seasonally adjusted basis, discontinued since the war, should be resumed. It is believed that definite seasonal patterns have been reestablished during the past few years, and users of foreign trade statistics would find a seasonal index very valuable.

(*b*) The quantum and value index numbers for the United States, now prepared by the Bureau of Foreign Commerce, are probably in need of investigation designed to improve their quality. The investigation should include the questions of more country and commodity detail, and the formula used. The import and export statistics compiled by the Bureau of the Census will probably be tabulated, beginning very shortly, on that Bureau's high-speed electronic computing equipment; the special advantages of that equipment for index number computations might appropriately be utilized. It is possible that the coverage of the commodities used in computing the index could be increased.

Governments.—The Intensive Review Committee called for expanded current sample survey work, between periodic censuses, "* * * to provide up-to-date trend information on the State and metropolitan area totals for tax revenues, debt, expenditures and employment, and other related facts." Not since the 1942 Census of Governments has a State-by-State distribution of State and local government finances been developed. This lack of recent government finance aggregates by State has been regarded for a number of years as the most serious gap in the current government statistics program.

In connection with the Intensive Review Committee's recommendations regarding construction statistics, the Bureau has found that it would be practicable to develop current estimates of spending by State and local governments for construction and related purposes. At a moderate cost, national totals with some functional detail could be provided quarterly. At further cost, coverage could be amplified to provide monthly data and figures for each State.

If further information is desired, we shall be glad to supplement the above by developing details, explaining obscure points, or commenting on relative importance. We have not attempted to follow the classification implied in your letter, as many of the above projects overlap two or more areas—improving reliability and plugging gaps, for instance.

Sincerely yours,

ROBERT W. BURGESS,
Director, Bureau of the Census.

DEPARTMENT OF COMMERCE,
BUSINESS AND DEFENSE SERVICES ADMINISTRATION,
OFFICE OF ADMINISTRATOR,
Washington, D. C. May 21, 1954.

Mr. STUART A. RICE,
Assistant Director for Statistical Standards,
Executive Office of the President,
Bureau of the Budget, Washington, D. C.

DEAR MR. RICE: In response to your letter of May 10, 1954, regarding Congressman Talle's request, I must emphasize that the Business and Defense Services Administration is primarily a user of statistics. Statistics which are gathered by other agencies of Government, by ourselves, or by private sources are used by Business and Defense Services Administration as a tool in implementing one or more aspects of the program for which we are responsible.

I believe my comments will be most meaningful if you will recall the areas of activity wherein Business and Defense Services Administration plays a major role. We administer the recently simplified Defense Materials System. We are

deeply concerned in several aspects of mobilization planning, including the Office of Defense Mobilization's feasibility-testing program, studies with respect to deficiencies in capacity, industry defense planning, stockpiling, and tax amortization. Our contacts with the business community are close. Our needs for economic statistics as a service to business, and as a basis for helping in the development of governmental economic policy, are many.

In our work, we place great reliance upon the Census of Manufactures and the Census of Business. We rely, to a lesser extent, upon the Census of Agriculture. Further, we have a keen interest in the Annual Survey of Manufactures, and also find the Bureau of the Census "Facts for Industry" series of great value. In addition, we draw upon the Bureau of Mines and Tariff Commission for information, and find the Census of Mineral Industries a valuable source of information.

There is, from our point of view, a serious and everwidening statistical gap due to the fact that the census of manufactures has not been taken since 1947. As the Intensive Review Committee recently stated: "The authorized quinquennial census of manufactures is the foundation of the industrial statistics program." The very fundamental benchmark data provided by the census of manufactures becomes progressively less reliable with the passage of time. Without a census of manufactures, BDSA, in its mobilization planning program, will be faced with the alternative of planning based upon dated information or else attempting to fill many gaps by some other means.

The annual survey of manufactures has been used as a tool to supplement the quinquennial census. Its existence from year to year has been precarious, inasmuch as it has never been included as a regular function of the Bureau of the Census. I concur with the report of the Intensive Review Committee that the annual survey should be made a regular and recurring activity of the Bureau. I also concur that, if possible, finer breakdowns of the data should be prepared and that, in particular, 100 percent enumeration of these areas of particular concern to a war economy should be attempted.

I should like to emphasize our needs respecting end-product material consumption. These data were collected with respect to steel, copper, and aluminum during the National Production Authority days. As time passes, we find it to be increasingly desirable to collect data of a similar nature on an up-to-date basis. It may be necessary to collect strategic material consumption data in nonmetal areas, as well. It is conceivable that such information can be obtained on a voluntary basis by persuading large users to maintain records on their own account and submit them to Government. The disadvantage in this procedure lies in the fact that the coverage may be inadequate, and in addition the data are open to question, since they would not be subject to editing by a reliable statistical organization such as the Bureau of the Census. The census of manufactures, if approved, could be adapted to serve our needs. If sufficient funds are made available to agencies of Government, there is a possibility of expanding the annual survey of manufactures during the intercensal years to provide for this type of detailed information.

In addition to the census and the annual survey of manufactures, we have a great interest in the "Facts for Industry" program of the Bureau of the Census. These may be described as output surveys of many single areas. The census has found it necessary to curtail certain of these surveys because of lack of funds. I believe that a minimum of curtailment is wise. The Business and Defense Services Administration, it should be noted, is either contributing in part or in whole to publishing certain FFI's. This is particularly true of the NPA historical statistical records, which are now of value to industry as a tool in market research.

With respect to the census of agriculture, and the census of minerals, I would urge that these be undertaken. The last census of agriculture, as you know, covered the year 1949. The last census of minerals was taken for the year 1939, and consequently adequate benchmarks are lacking with respect to value of products, labor, materials, capital requirements, etc.

The Office of Distribution of BDSA is particularly interested in the census of business, which was last taken covering the year 1949. It is essential, from the point of view of distribution, that we have a clear picture of the flow of goods through channels of distribution. The Bureau of the Census had planned, as part of its Census of Business for 1953, to collect such information from certain industries but not for all. We feel that plans of Census should be expanded in this area. A further gap in the area of distribution lies in data respecting pipeline—the movement of goods through the distributive process. Rather de-

tailed information with respect to sales and inventories of key products of our economy is desirable. At the moment, dollar value data are available with respect to broad categories of products, but the detail is lacking.

The publication County Business Patterns has proved to be useful as a market research tool both to Government and to industry. Refinements of the data are required. Thus, for example, multiple-unit firms may be shown as located in one county, as reported by the company's headquarters, when, in fact, they are located geographically in several counties. The Office of Distribution of BDSA has recommended that tabulations be shown separately, for selected industries, according to the location pattern of such industry in all large and small counties where the industry is located. In addition, it would be well to improve classification of merchant wholesalers into kind-of-business detail. These and other suggestions have been discussed with Census and OASI, with a view to improving a very fundamental market research tool.

For some time the Department of Commerce and Department of Labor have been aware of a serious statistical gap in the area of construction statistics. As you know, a sizable supplemental appropriation for fiscal 1955 is being requested in order to improve these statistics. Statistics, in this area, are vital to Government in making sound policy decisions, and are equally essential in assisting private industry in maintaining a high-level economy. Both the Intensive Review Committee and the Chamber of Commerce of the United States have recognized serious deficiencies in this statistical area. The objective underlying the plan for improving statistics of construction involves placing reliance upon primary data collection instead of secondary sources of unknown, unverifiable, or questionable reliability. The plan proposes to introduce improvements with respect to: (1) Estimates of new construction activity, (2) estimates of alterations and repairs, (3) the building materials index, (4) computation of materials and labor requirements, (5) estimates of housing vacancies, (6) the operation of the residential building industry. If funds are provided, I feel certain that the Department of Commerce and the Department of Labor will contribute significantly to a statistical clarification in this area.

I hope that my comments will prove beneficial in enabling you to answer Congressman Talle. If you should need additional information, please feel free to call upon me.

Sincerely yours,

H. B. McCoy,
Deputy Administrator.

Department of Commerce,
Office of Business Economics,
Washington, D. C., May 19, 1954.

Mr. Stuart A. Rice,
Assistant Director for Statistical Standards,
Bureau of the Budget, Washington, D. C.

Dear Mr. Rice: In accordance with the request made in your letter of May 10, I am submitting the attached statement giving our suggestions relating to the improvement of existing series or to plug gaps in existing programs.

You will note that in some cases improvements can be made if more funds are made available to this agency. In other cases, improvements can be made only if greater cooperation is obtained from private sources. Finally, many of our series, particularly those used in the national income accounts, are based on compilations made by other Federal agencies and we have indicated the improvements we consider to be necessary in such cases.

Sincerely yours,

M. Joseph Meehan, *Director.*

Suggestions for the Improvement of Economic Data in Response to the Request to the Bureau of the Budget by the Subcommittee on Economic Statistics

Submitted by the Office of Business Economics

Department of Commerce

Congressman Talle, in his letter of April 28, 1954, to the Director of the Budget, inquired as to "projects or proposals * * * essential for the efficiency, reliability and accuracy of existing series or to plug gaps in existing programs." The

following statement indicates some of the steps which, if taken, would importantly assist the Office of Business Economics in fulfilling its responsibilities for the provision of economic information.

A. IMPROVEMENT OF BASIC DATA REQUIRED FOR NATIONAL INCOME AND PRODUCT ESTIMATES

1. Business censuses.

(*a*) The basic censuses ought to be taken regularly and on an integrated schedule. This will insure a periodic check on preliminary estimates for a number of series and also tend to assure consistency among the various censuses.

(*b*) In devising the questionnaires and tabulations more attention should be given to the needs of national income estimation. (For example, information on the distribution of manufacturers' sales, sales to Government by manufacturers and wholesalers, and more complete commodity detail, should be obtained in connection with the censuses.)

(*c*) The census of State and local governments should be taken regularly and more frequently. (At present it is on a decennial basis, but was not taken in 1952.)

2. Internal Revenue Service information.

(*a*) The Internal Revenue provides us with a very useful body of basic statistical information. The value of the data could be improved if means could be found to make the materials available on a schedule which would more nearly fit OBE needs.

(*b*) It would be very helpful if the noncorporate business tabulations could be regularized and issued with less of a timelag. Since 1940, complete tabulations of proprietorships and partnerships have been provided for 1945 and 1947, and of proprietorships alone for other odd years. The present tentative plan for future tabulation of proprietorships and partnerships in alternative odd years does not meet our needs for the national income estimates. Tabulations of informational returns from tax-exempt organizations would likewise make for improvement if made frequently and regularly.

(*c*) Continuation and strengthening of the sample audit tabulation program of the IRS, including its extension to corporate income-tax returns, would provide invaluable statistical information.

(*d*) Special tabulations from IRS individual returns with rental income, as an exploratory study, would provide information needed for the calculation of rental income.

3. Securities and Exchange Commission-Federal Trade Commission profit tabulations

(*a*) A speedup in quarterly tabulations of manufacturing profits is necessary.

(*b*) The reporting program should be extended to trade corporations.

4. Improvement in Government expenditure data

In periods of large and changing Federal Government expenditures, it is important to have information from the Government on Federal checks outstanding, and Federal prepayments and accounts payable. Information on Government purchases (Federal, State, and local) by type of commodity and service purchased would also be desirable.

5. Improvement of construction statistics.

This program is now under consideration by the Business and Defense Services Administration.

6. New projects

(*a*) In addition to the improvement in IRS tabulations for noncorporate business firms (see *2* above), the establishment of a sample-based reporting system to provide current information should be considered.

(*b*) The most significant gap in the available information on saving is the absence of usable data on saving by economic groups. At present we are unable to tell how our total of personal saving is distributed among farmers, nonfarm businessmen, and other individuals. This omission can be filled by compiling annual data through the sampling approach.

B. IMPROVEMENT IN CURRENT BASIC BUSINESS STATISTICS

The following suggestions are confined to the broad aspects of the existing program. There are gaps in the preparation of detailed estimates, particularly in the consumption field, which would be too numerous to list.

1. Sales and inventories

(*a*) Speed in tabulation of manufacturers' sales and inventories reported on tax returns would be helpful in providing earlier checks on our data obtained from reports of a sample of firms.

(*b*) There is a virtually complete lack of current monthly data on changes in inventories held by small independent retailers. The Bureau of the Census is now exploring the feasibility of collecting such data. Our aggregate data on manufacturing inventories by stage of fabrication (that is, by finished goods, raw materials, and work-in-process) are fairly adequate, but a more detailed industrial break of such information would provide a much needed analytical tool. This cannot be done at this time since a significant portion of our present panel of manufacturers do not break down their aggregate inventories into these categories. Major results here would require more extensive gathering of statistics at increased cost. Larger coverage would also permit the development of more detailed statistics on new and unfilled orders.

2. Plant and equipment expenditures

The data on actual and anticipated business investment collected by the Office of Business Economics and Securities and Exchange Commission in new plant and equipment are quite reliable in manufacturing, electric power and gas, communications, and railroading. However, the development of more adequate basic data in the commercial and nonrail transportation fields would provide additional essential information.

3. Business population

Two major improvements in our statistics on business population and turnover could be made if sufficient funds were available. One would be to restore the series to a quarterly basis rather than the present semiannual one. The other would be to get information on business discontinuances from the more complete and more detailed records of the Bureau of Old-Age and Survivors' Insurance rather than through the less adequate—though less expensive—current procedure.

4. Consumption expenditures

(*a*) The estimates of consumption expenditures are almost entirely based on data supplied by other public and private agencies. Restoration of the collection of data on several types of consumer services by the Bureau of the Census (discontinued due to budgetary limitations) and of price information for individual services and commodities by the Bureau of Labor Statistics (information lost when procedures of compiling the consumers' price index were changed) would be helpful.

(*b*) In the commodity area, the very useful information on the commodity analyses of retail sales generally collected in the censuses of business is not available for any recent year.

5. Financial developments

A valuable single improvement in our statistical knowledge would be the reinstitution of the Federal Trade Commission-Securities and Exchange Commission financial survey of trade corporations. In addition, useful analytical studies could be made through one-time spot surveys related to both our financial structure and to economic developments of a special nature.

C. IMPROVEMENT IN BALANCE OF PAYMENTS DATA

1. Data on commercial credits and liabilities are at present particularly important as credit plays an increasing part in international trade. Improved control and enforcement of reporting, involving more personnel, will be necessary to secure more complete data.

2. Among other items on which more complete information would be needed is the value of foreign funds invested in direct investments in the United States. This item, now estimated on the basis of a wartime benchmark figure and sample questionnaires, should be reestimated on the basis of a complete survey which would serve as a new benchmark for some time.

3. There are several types of transactions for which no information is available. Among these may be listed: Foreign funds invested in United States commodity exchanges; real estate transactions; maritime insurance; receipts of royalties, management fees, etc., except for American parent companies from their own subsidiaries and branches.

4. With respect to merchandise trade, information is needed upon which to base adjustments for differences between the time of arrival or departure of the merchandise and the change of ownership. There is also need for the study of possible differences between the valuation of merchandise in the trade statistics and actual payments. This study to be of value would have to be more or less continuous. Also, some speeding up in the compilation of merchandise trade data is desirable to provide more prompt reports on the balance of payments.

5. Additional resources would be required to prepare needed data for the balance of payments with individual countries.

UNITED STATES DEPARTMENT OF THE INTERIOR,
BUREAU OF MINES, OFFICE OF THE DIRECTOR,
Washington, D. C., June 14, 1954.

MR. STUART A. RICE,
Assistant Director for Statistical Standards,
Bureau of the Budget, Washington, D. C.

DEAR MR. RICE: With regard to your letter of May 10 concerning the inquiry of Congressman Henry O. Talle, as to what improvements are essential for the efficiency, reliability, and accuracy of existing series or to plug gaps in existing programs, it may be said that the statistical publications of the Bureau of Mines in general adequately serve their purposes and meet the needs of Government, industry, and other users. Of course, there is always room for improvement or change in many of our operations, particularly as a result of changing economic conditions, changes in industry operating techniques, etc., but it is my opinion that within the limitations of the voluntary reporting system under which the Bureau of Mines does, and should, collect its statistical data, and the limited funds provided for our operations in this field of activity, we provide outstanding statistical coverage of both quantity and quality on the industries within the cognizance of this Bureau.

The principal areas for improvement that have been revealed by constant internal examination, and by advice from formal and informal industry advisory committees, are as follows:

1. Continuation of periodic conferences for guidance with users of Bureau of Mines data, not only from the industries which we canvass but also from other sources such as the industries utilizing the products which we canvass, other Government agencies, and research and educational institutions. The industries that we canvass provide guidance on the best means for collecting essential information with the least burden upon the reporting companies.

2. There is continuing need for acceleration in the release of Government statistical reports. This is constantly being stressed in the Bureau of Mines, but is subject to the limitations of the voluntary reporting procedures and the dependence upon other agencies for component parts of our reports, such as foreign-trade statistics.

3. More adequate descriptions of some published statistical series. Efforts within the Bureau to provide such information are under way. Also, in some instances, more comprehensive instructions and definitions for reporting would be helpful.

4. There is need for certain additional information such as stocks of mineral commodities in the hands of others than the producers of these items. However, collection and publication of such information is dependent upon the provision of funds for this purpose.

5. There is need for the collection of certain basic details pertaining to the distribution of bituminous coal, not only for analysis of coal marketing problems per se but, and importantly, for better analysis of the component problems involved in the Nation's changing pattern of energy consumption.

6. More adequate data concerning use patterns of minerals generally are required. To provide such information will usually require canvassing the users of these commodities since the producing industries are already providing as much of this information as their records permit.

7. A related problem is that of too slavish a devotion to the standard industrial classification, despite the fact that many industries are fully integrated and do not conform to these statistical divisions. Another revision of this classification system would be helpful in many ways.

8. The uniform classification of establishments and companies by the various agencies collecting data has progressed at a very slow pace to the detriment of certain Government statistics. It is especially difficult, for example, to connect published industry production statistics with other industry statistics. Essentially, the statistics of each Government agency have remained separate entities, apart and distinct from one another.

9. The Bureau would like to obtain the statistical data needed to better enable it to perform economic studies which entail relating the production data to the comparable data of other agencies, in order to analyze the problems of the effects on minerals industries of tariffs, taxes, and assistance programs. To this end, the Bureau perhaps should be permitted to fill the gap by collecting sample data on certain expenditures of establishments producing minerals.

10. An unfortunate gap from the standpoint of strategic readiness is the nonexistence of reliable statistics on mineral exploration and development activity.

11. A review should be made of the caution of the Census Bureau, which at times appear excessive, in the release of confidential data on nonmandatory surveys. Other agencies adequately protect their respondents with less restrictive interpretations of the Federal Reports Act which enable effective interagency cooperation and reduce statistical costs.

12. More can be done by all agencies as public relations to reduce misunderstandings by respondents about the relationship between the statistical collection activities of the various Government agencies.

The Bureau appreciates the opportunity to furnish these comments for your consideration.

Sincerely yours,

J. J. FORBES, *Director.*

UNITED STATES DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, D. C., May 25, 1954.

Mr. STUART A. RICE,
Assistant Director for Statistical Standards,
Office of Statistical Standards, Bureau of the Budget,
Washington, D. C.

DEAR MR. RICE: I am sending you the material requested in your letter of May 10 concerning improvements in existing series and gaps in existing programs. I want to add a few general points which do not fit exactly into your outline.

First, no provision is made in the Bureau at the present time for research and adequate economic analyses of the data which we are collecting. So much of our time and effort is spent in the collection and processing of the statistical series that we have practically no staff for analytical work. Yet the true significance of these data, especially for purposes of governmental policies, can only be brought out by analysis and interpretation.

Second, this report of ours to you gives no hint of the tightness of our day-to-day operations at the present time. Our staff is really too thin to do the job adequately. I am not sure how long we could continue to carry the existing series with the present staff and without bringing about a gradual decline in quality.

Finally, we have included our construction statistics needs in this list, although, as you know, we have presented a supplemental budget which is now under consideration by the Bureau of the Budget. When you send this material down to Chairman Talle, you will need to indicate the status of the supplemental budget.

Sincerely yours,

EWAN CLAGUE,
Commissioner of Labor Statistics.

DEFICIENCIES AND GAPS IN THE BUREAU OF LABOR STATISTICS PROGRAM

A. WAGES

1. Labor market (community) wage surveys

The fiscal 1954 program of occupational wage surveys in 17 major labor markets should be expanded to cover 40 areas (20 annually and 20 in alternate years).

These 40 areas contain approximately one-half of the urban population of the country. A program of this magnitude is essential: (1) To provide basic insight into the structure of wages in urban areas; (2) to meet a substantial part of the needs of the Department of Defense and other Federal agencies for information for wage determinations for hundreds of thousands of blue-collar employees; and (3) to answer a wide variety of requests by Government, employers, unions, and the general public for current information on wages by occupation. Such an expanded program would permit the preparation of broadly based wage and salary indexes for office workers and for skilled and unskilled plant workers in urban industry which would have great significance for economic analysis.

2. Industry wage surveys

Occupational wage studies on an industry basis should be expanded to provide particularly for more surveys of relatively low-wage and problem industries. At the present time, only 4 to 5 industry wage studies can be undertaken each year. Industry studies are needed for consideration of public policy in such fields as minimum wages, tariffs, and industry location, and for broad labor, management, and general public use.

3. Employer expenditures on wage supplements

Employee benefits supplementary to basic wages have increased greatly in importance in recent years. Various forms of premium pay, pay for holidays, vacations, and other time not worked, and various types of health, insurance, and pension arrangements contribute to employee welfare, play a significant role in collective bargaining, and represent a growing item of expense to employers. The Bureau of Labor Statistics develops no regular information on employer expenditures on such benefits, and this represents a serious deficiency in the wage program, for which the Bureau of Labor Statistics has been publicly criticized. Provision should be made for a regular program designed to measure expenditures on supplementary benefits.

4. Economic status of professional employees

The Bureau of Labor Statistics several years ago had a small program of studies of the salaries and working conditions of predominantly salaried professional groups, such as nurses, librarians, dietitians, and social workers. These studies, which were made in cooperation with the appropriate professional associations, need badly to be resumed, in view of the ever-increasing importance of salaried professional employees in the economy. Great interest has been expressed by nurses and other professional groups for studies of salaries and working conditions. Provision should be made for two surveys each year of employees in particular areas of salaried professional work, with the surveys repeated at 4- to 5-year intervals.

5. Current wage developments

The Bureau's wage program does not provide adequately for current information on wage developments. At the present time, the monthly report on current wage developments is restricted to information on wage and related fringe developments for those settlements affecting 1,000 or more workers. Thus, some industries, e. g., hosiery, cement, and machine shops and some geographical areas, e. g., the South, are not adequately represented. The sensitivity and general value of the report would be greatly enhanced were resources available for summarization of wage settlements in situations involving 500, or possibly 200, workers and over.

B. INDUSTRIAL RELATIONS

1. Field studies of industrial relations

A well-rounded program of research in industrial relations requires provision for field investigation to supplement analysis based on documentary sources. In terms of public policymaking alone, fundamental research of a continuing character should be carried on with reference to wage guaranties, private insurance, and pension programs, experience with different types of grievance and arbitration provisions, the consequences of long-term contracts for industrial relations, the economic and social consequences of labor disputes, and a host of other questions. Provision for this type of work is now lacking in the Bureau of Labor Statistics and represents a major gap in the work of the Federal Government in the field of industrial relations.

2. Industrial relations documents and analysis

The Bureau of Labor Statistics now maintains a file of approximately 5,000 current collective-bargaining agreements out of an estimated 100,000 in existence. This file is too small to permit adequate representation of agreements by industry, union, size of firm, region, and other characteristics. Similarly, the Bureau's files of other documentary materials basic to an understanding of labor-management relations require strengthening if the Bureau is to meet the heavy public demand for information in this area and more fully discharge its responsibilities under section 211 (a) and (b) of the Taft-Hartley Act. Provision should be made, therefore, for an expanded file of basic industrial-relations documents and, of equal importance, for more intensive analysis of their content.

3. Collective bargaining

There is no statistical measure of the scope and extent of collective bargaining, though the number of workers directly covered by collective bargaining has undoubtedly increased in recent years. In analyzing broad economic problems, questions arise on such matters as the extent of pattern-type wage settlements, the effect of various types of bargaining and settlements on wage levels, technological developments, employment and unemployment, and the economic health of particular industries. Benchmark data on scope and extent of collective bargaining would be useful in analyzing these issues.

C. PRICES AND COST OF LIVING

The essential improvements in the statistical series on prices and the cost of living involve additions to the fund of primary data which will serve three purposes: (1) Maintenance of the reliability and accuracy of the series now compiled; (2) reorganization of price-collection procedures so that the data obtained may be used for additional purposes, for example, for measuring time-to-time price changes and place-to-place price differences, at a given point in time; and (3) development of new series to serve the growing needs for data on prices and the cost of living in connection with studies of economic growth and development.

The efficiency of the collection, compilation, and publication of statistical data on prices and the cost of living would be greatly increased by the utilization of the primary data for the maximum number of applications in economic and business research.

The principal additions to the current program for the collection of statistical information on prices and the cost of living required for improving the efficiency, reliability and accuracy of the series now compiled are as follows:

1. Periodic panel surveys of consumer incomes, expenditures, and savings, to observe changes in spending habits that occur with changing economic conditions, and correlated research into data from other sources, directed toward discovery of relationships between income, expenditures, and other variables affecting the cost of living, standards of living and workers' welfare in general. Such surveys are essential for keeping current the representative character of the items included in the Consumer Price Index, and the sample of outlets from which prices are collected. They will also provide data needed for a wide range of policy decisions (e. g., in regard to taxation, maintaining economic stability, etc.) as well as for market analysis.

2. Periodic preparation of family budgets of the type of the City Workers' Family Budget for families in various economic and geographic situations. The City Workers' Family Budget is widely used, but it has not been revised to take account of postwar changes in consumption habits, and of changes in prices since 1951. When it was up to date, it only applied to one group within the total population even though a large and important group. Such research is essential to establish the income required to support a high standard of living and that required to maintain a modest but adequate standard of living in communities of different types in the United States, as well as for comparisons of living costs among cities in this country, and between cities in the United States and other countries.

3. Introduction of recurrent surveys of prices paid by industrial and household consumers to uncover hidden price changes (such as absorption or addition of freight charges, changes in terms of credit, addition or subtraction of guarantees as to repairs, changes in trade-in values, and in quantity discounts), for im-

proved measurement of price changes, and interpretation of price index movements at all stages of the business cycle and at various levels of distribution.

4. Extension of the coverage of the wholesale price indexes to important industrial sectors not now priced, for example, transportation equipment, plastic products and various types of special industry machinery and equipment, extension of the index system to cover additional transaction levels or to cover new and important groups of purchases (including Government).

5. Development and publication of indexes of price dispersion at the same transaction level and of indexes of price spreads across transaction levels.

6. Extension of the coverage of price collection, cities, reporters and commodities, to provide for the regular publication of average prices for specific goods and services. Such extension is urgently needed to provide price information for individual localities in regions within the United States and for comparisons between the United States and other countries, and for the development of indexes measuring the general purchasing power. It would permit the initiation and maintenance of recurrent indexes measuring the difference in purchasing power of the dollar among the cities now included in the sample for the Consumer Price Index.

D. PRODUCTIVITY MEASUREMENT

Measures of productivity changes in the economy are of great significance in any attempt to understand problems of employment, unemployment, price and wage movements, technological progress and economic growth, and as a guide to public policies involved in such problems.

The current program is seriously deficient in that it attempts to measure productivity trends for only selected segments of the economy, is limited to a measure of the relationship of labor input and production data, and does not identify or evaluate technological and other factors causing productivity changes.

The following is recommended to eliminate major gaps:

1. Studies of productivity trends for major sectors of the economy

The present program provides annual indexes in manufacturing, mining, and agriculture only covering the years 1939 to the present in manufacturing and earlier years to the present in other sectors. Important areas of the economy such as construction, wholesale and retail trade, services, and large parts of transportation and utilities are excluded. Without meaningful indexes in these sectors, it is impossible to provide a more complete insight into these important parts of national economic life. The measures are needed for evaluation of trends in the entire economy with regard to changing patterns of employment and unemployment and for purposes of general economic analysis.

2. Productivity measures in terms other than labor input

Existing measures of productivity have frequently been criticized because they indicate only the change in the relation of output and one input factor—labor time. It is felt that great importance would be attached to more adequate information on the relationship between various uses of capital in the form of plant or equipment and productivity. Measures in terms of unit capital, fuel and energy would, moreover, broaden the existing knowledge of the relationship between productivity and consumption of natural resources.

3. Studies of technological developments

Studies obtained through direct visits to plants should be reinstituted to provide materials for analysis of technological developments, their impact on productivity trends and implications for future levels of employment requirements. The current program of measuring output per man-hour from published data is, with some few exceptions, a measurement program. Little information is available for analysis of trends in the light of changes in technology, capacity, or changes in product design. Additionally, information obtained through a carefully planned program of establishment studies would strengthen existing secondary source measures of output per man-hour, and would provide productivity measures in those industries for which secondary data are inadequate or unavailable.

4. Relationship between productivity and industrial relations

The program could act as a stimulus to both labor and management toward finding stable solutions to problems arising out of technological change. This would be especially true in the areas of workloads, work schedules, and dissipation of special skills, as well as worker displacement.

There has been only fragmentary research done in order to assess the effects of labor-management relations on productivity changes and vice versa. Running through all this field is the major problem of technological displacement. This research would provide a general body of information through a series of case studies, indicating the relationships between the social climate existing in an industry and the industry's productivity efficiency.

5. International comparisons of productivity

At present there are no overall estimates of productivity for the major nations of the world in a form which will permit international comparisons. The proposed program would entail the bringing together of productivity measures now available (or their component data) for a more adequate international comparison of this productivity data. This research would also permit the highly desirable assessment of the economic progress made by the United States compared to that made by the Soviet Union and its satellites. A program is needed which would envision the comparisons of productivity trends and levels between countries not only on broad economic sector levels but in many instances at the plant level in order to analyze related technological data existing in various countries. Such a program would provide data useful to defense planning and to peaceful trade relations between the United States and other nations.

E. CONSTRUCTION STATISTICS

The following summary of major inadequacies in the housing and construction statistics program of the Bureau of Labor Statistics includes several activities which have been a part of the Bureau's operations in the past, but have been curtailed or discontinued because of budget reductions. The first item listed relates to one of the most serious gaps in the construction statistics field, the lack of satisfactory basic data for the estimates of private nonresidential construction activity. The need for more adequate information about construction and housing has been pointed out repeatedly by advisory committees, other Government agencies, and labor and industry groups.

These gaps need to be filled in order that we may be equipped to deal with the following fundamental policy problems: (1) Public housing policy, including the questions of the sufficiency of our current and prospective housing supply; (2) problems of economic growth and stability, with particular reference to the central role of construction; (3) Government policies and operations in the area of credit and financing of construction; and (4) evaluate manpower resources and skills available in the construction industry for emergency mobilization programs and to determine the number and kind of workers required for essential construction in such an emergency.

1. Current reports on value of private construction work started

Estimates of the amount of construction work done each month are derived chiefly from reports on the value of new construction projects started. For residential building, and Federal construction, the basic data are now reasonably adequate.

Sources for the estimates of private nonresidential construction expenditures are at present unsatisfactory and must be supplemented if the estimates are to be improved.

The primary sources of these data are private contract reporting services and local building permit records. Neither source is entirely satisfactory, by itself, but both combined, if supplemented in the manner here proposed, will provide an adequate base for the expenditures estimates.

Heretofore, the estimates of private construction have been based chiefly on the contract award data supplied by the F. W. Dodge Corp., Engineering News-Record, and other local reporting services. The most important of these, Dodge, covers only the 37 Eastern States. Engineering News-Record reports only on large, so-called heavy engineering projects. Relatively little use has been made of the BLS monthly reports on local building permits for the nonresidential estimates because until quite recently the coverage was incomplete and the quality of the reports for this purpose has not been investigated.

The building-permit reports will not by themselves, however, supply all data needed, because they do not cover nonpermit areas (which have about 20 percent of the nonfarm population) and they usually do not include the large, nonbuilding projects—mostly publicly financed—such as highways, water, and sewer projects, etc. On the other hand, the private reporting services are seriously deficient in

that they do not include the large number of small projects of all kinds. Neither source provides data on farm construction.

The Bureau of Labor Statistics now conducts monthly field surveys in the nonpermit portions of sample areas, in order to prepare the monthly estimates of new housing units started. This sample is not sufficient, however, to fill the gap between the local permit reports and the private reporting services for nonresidential estimates. It is recommended, therefore, that the field survey program of BLS be expanded to provide an adequate base for (1) current estimates of value of small construction projects started in nonpermit areas, (2) estimates of farm construction, (3) separate estimates of work started in each State, and (4) investigations of the scope and adequacy of the local permit reports, which will provide data needed for evaluating and adjusting the permit totals.

The proposed program will provide the information needed to supplement and coordinate the contract reports and the building permit data, thereby providing current estimates of the value of all types of construction work started, and an adequate base for the estimates of private nonresidential expenditures.

2. Characteristics of new housing

The Bureau has historically supplied the only statistics on the volume and characteristics of new housing, using building-permit data as a basic source of information and of statistical samples of projects for field study. No information about the characteristics of the new housing supply has been obtained since the Bureau's limited studies in selected metropolitan areas in 1949–51. There is evidence of considerable change since that time in the quality of the accommodations being provided, the amount and kinds of materials and equipment being used, and the labor required. Studies of housing characteristics should become a continuing phase of the Bureau's program to keep abreast of the impact on the economy of this huge materials consuming industry, and to help evaluate the way in which new housing is meeting the needs of wage and salaried workers.

3. Surveys of the operations of residential builders

Residential builders are an important element in the economy, not only in relation to their capacity to produce needed housing, but also in their role as employers of labor and buyers of industrial products. Very little factual information is available, however, as to the current status of the residential building industry, especially: The number of building firms, their relative size in terms of number of houses built per year, other business activities, methods of operation and financing, and other data bearing on the industry's ability to produce good housing at a reasonable cost and at a fair profit. Such facts should be available to guide the Government in the formulation of credit policies and housing programs and as business aids. Availability of such data to private financial institutions and building materials producers will assist in the orderly and efficient production of housing consistent with the needs of the economy.

It is generally believed that the character of the house-building industry has been changing rapidly since 1945. The unexpectedly high rate of family growth, population shifts, changes in patterns of consumer buying, changes in the supply of credit and in interest rates and many other factors have affected the structure of the industry. The program should therefore provide for annual surveys of residential builders' operations.

4. Characteristics of the housing demand

A federally assisted public housing program is based on the assumption that among low-income families there are some who cannot obtain adequate housing in the private market. The size of this need is not known. It cannot be measured, moreover, without specific information on family size and incomes of the buyers and renters of new housing. Can the average wage earner buy a house large enough for his family at a price within his reach? What special financing problems face the low-income buyer in terms of down payment and settlement costs, second mortgage interest rates, etc.? Public housing programs must be based on factual information regarding the extent to which private builders are meeting the needs of the buyers. This can be established by a system of annual sample surveys in which new house buyers or renters provide information on family size, income, cost of housing and related data.

5. The housing inventory

The monthly report on new permanent nonfarm dwelling units started is the only source of current data on housing developments. Issuance of the results of the 1950 census of housing has focused attention, however, on the fact that we know very little about the living accommodations of families who do not acquire new housing. Thousands apparently live in temporary shelter of one kind or another; basements, attics and other parts of converted structures. Furthermore, a large but unknown portion of the housing supply is lost each year by demolition of structures or by conversion of houses to nonresidential uses. In order to estimate future housing needs, Government and industry require annual measures of dwelling unit conversions and demolitions. Estimates of construction, demolition, and conversion of farm housing are also obviously required to complete the picture.

6. Construction labor requirements

The construction industry is a major employer of skilled labor. Because of the need for highly qualified building craftsmen in many phases of the construction operation, it frequently happens that construction labor shortages occur in localities where there is substantial unemployment. This problem must be taken into account in public works scheduling, if the public works program is to make a maximum contribution to economic stability and maintenance of employment.

The analysis of current and future labor requirements for specified construction projects or programs is made by the Bureau of Labor Statistics by the application of labor-value ratios derived from the analysis of payrolls on typical projects. Most of these labor ratios, however, are now obsolete. Since the end of the war, funds have been provided for the analysis of labor factors in a few selected types of military and defense-connected construction. For most types of privately financed construction, however, the Bureau has no information of this nature, and has been forced to estimate site labor requirements by crude and indirect methods. The Bureau's estimating factors for such types as conservation and development work, public educational building, sewer and water projects, and non-Federal hospital construction are nearly 20 years old, all having been derived from studies of projects financed under the emergency public works program of the early 1930's. In the meantime, changes in materials, methods and cost relationships have virtually invalidated the results of those studies with reference to present-day conditions.

7. Reports on construction activity financed by State and local governments

Current estimates of construction financed by non-Federal public units are derived from private contract reporting sources. For the reasons already noted, these sources are inadequate, and the estimates are therefore unsatisfactory. The most practical solution to this problem appears to be the adoption of a mail reporting system, covering all State governments and the larger city and other local units, with a sample of smaller places. This reporting system could be based on a benchmark derived from the periodic census of governments.

8. Estimates of construction expenditures

For the federally financed segment of construction, current data on the value of work put in place each month are obtained primarily by direct reporting methods. That is, each Federal contracting agency obtains from its supervising engineers monthly progress reports which measure the amount of work done. Similar data can probably be obtained from at least the larger State and local government units.

This method can also be applied to the large privately financed projects after the projects have been identified by the process described in section 1, above. A similar method, if applied to smaller projects would be prohibitively expensive, because of their number and geographical dispersion. Estimates of value put in place for the smaller projects can be derived within reasonable error limits, it is believed, by the application of standard time factors, representing the dollar amount of work done each month during the construction of typical projects. This is essentially the method now employed, but the time patterns used are badly out of date and unrepresentative of many important types of construction.

9. Alteration and repair expenditures

Maintenance, repair, and alteration of existing structures involve the consumption of enormous quantities of materials and manpower. Some of the

largest producers of such items as roofing, siding and flooring estimate that as much as 60 percent of their output goes into the "fix up" market. Estimates of the actual volume of this market are wholly unsatisfactory, because of the lack of basic data. The most practical solution to the problem is to conduct periodic surveys—perhaps annually—of a sample of households, commercial and industrial establishments, institutions, etc., to find out how much is spent on labor, materials and equipment for building maintenance, structural alterations, modernization, and replacement of parts such as roofs, floors, etc.

F. EMPLOYMENT, HOURS AND EARNINGS

Data on employment, hours, and earnings are among the most important economic indicators. It is essential therefore that they be accurate and complete. It is highly desirable that they be available in sufficient detail to measure differential industry trends, geographic variations, seasonal movements, and other factors which help to identify problems or areas which impede economic growth and stability and which are therefore of prime concern in the formation of public policy. Attention is directed to the following program gaps:

1. Employment, hours and earnings by industry

Development of current estimates of the trend in employment, hours of work, and earnings among about 150 four-digit industries, e. g., blast furnaces, machine tools, synthetic rubber. The development of these estimates will permit greater insight into the impact of economic and employment trends among important industries in this country.

2. Labor turnover statistics

These data are one of the best barometers of important economic trends and often serve as a tipoff on forthcoming developments in employment and unemployment. It is proposed therefore to develop a more accurate sample in the field of labor turnover statistics in order to provide data on separations and accessions among industries for the Nation as a whole and for important areas in the country.

3. Area statistics

Expansion of the current program of employment, hours and earnings data for about 100 cities to all of the 171 standard metropolitan areas in the United States. These data are essential for knowledge of the impact of employment and unemployment among the various localities in the United States.

4. Employment, hours and earnings by size of business

No information is now available on employment, hours and earnings in the small business sector of the American economy, despite a growing interest in information for this group. The Bureau of Labor Statistics did develop and produce employment statistics for small business during the Korean war thereby demonstrating the feasibility of preparing estimates on differential employment trends by size of establishment. These should be developed on a continuing basis within the context of the current employment statistics program.

5. Straight-time earnings for selected industries

There is a heavy demand for straight-time earnings data (exclusive of overtime and premium pay) by both union and management for use in collective bargaining. Straight-time earnings figures are also used for escalation in many Government and private contracts. These data should be collected for a selected list of industries on a continuous basis.

6. Indexes of payrolls

Indexes of payrolls measuring the effect of changes in employment, hours of work, and rates of pay, are valuable barometers of economic conditions. At present, the Bureau publishes only at the all-manufacturing level. Additional indexes should be prepared for important individual industries.

7. Index of aggregate man-hours

Data on hours of work are not collected for certain nonmanufacturing industries. Estimates of hours should be prepared for all nonmanufacturing industries and an aggregate man-hour index constructed for the total nonagricultural sector of the economy. Such an index would be a valuable indicator of economic conditions and has been requested by the Joint Committee on the Economic Report.

8. Labor income and nonfarm earnings

Present earnings data are for production or nonsupervisory employees and exclude office workers and the higher salaried employees. Data on total payrolls for all employees should be obtained and an average earnings figure prepared for the nonagricultural segment of the economy.

9. Total annual labor income and hours of work

Total annual income of wage and salary workers would be a valuable figure for analysis of economic conditions. Presently computed average weekly data for 12 weeks out of the year (1 week each month) do not provide an adequate basis for estimating total income for the year which may be subject to irregular fluctuation outside of the reporting periods in each month and which omits irregular bonus payments.

Similarly, total annual hours of work should be obtained as a measure of total labor input.

10. Employment of women

The present program provides data on the employment of women in manufacturing industries on a quarterly basis. This should be expanded to provide estimates of the employment of women in nonmanufacturing industries on a national level. Statistics on the employment of women by State and area should also be developed.

11. Standard industrial classification code structure

Statistics of employment and earnings for nonmanufacturing industries should be classified on the Standard Industrial Classification code. They are at present on the Social Security Board code and hence, are not directly comparable with statistics of other agencies.

G. MANPOWER ANALYSIS

Information is required on manpower requirements and supply in assessing programs of education and training consistent with the Nation's future needs, and in a mobilization economy for a host of public policies relating to appropriate disposition of manpower between military and essential civilian demands. The Bureau's manpower program is deficient in many respects, the most important of which are:

1. Mobilization production requirements for the entire economy of the United States

In connection with its responsibility for making manpower requirements estimates for mobilization, the Bureau of Labor Statistics needs production requirements estimates for all sectors of the economy—civilian as well as military—prepared by authoritative and responsible agencies. Production programs covering the whole economy are essential because manpower is transferable from industry to industry and the total requirements for manpower—in the aggregate and for specific skills—have to be estimated in connection with the Bureau's work on critical occupations, the development of training programs, etc.

At present, the Office of Defense Mobilization has done a great deal of work in getting military product programs from the Department of Defense and estimating the resultant requirements for intermediate products and components and other hard goods. However, no production programs consistent with mobilization conditions are available for nondurable manufacturers, transportation, and utilities and certain other important segments of the economy. The Office of Defense Mobilization should provide mobilization-production programs for all sectors of the economy or make arrangements with other agencies responsible in specific fields to provide such programs, and make adequate funds available for such work.

2. Occupational outlook handbook

Revision of this widely used publication is essential. The last edition was prepared in 1950, using 1949 data, and the Department has received many requests for revision and some comments from industry concerning the obsolescense of some of the information contained.

3. Long-range employment outlook studies

In connection with the occupational-outlook program, a comprehensive study should be made of long-range trends in the major industries of the United States and the changes likely to take place over the next several decades; and the

impact of technological and institutional changes upon the occupational structure of the various industries. This information is needed in connection with the assessment of programs for education and training necessary to provide trained workers in numbers consistent with the Nation's future needs. A number of basic studies have been made by private and Government groups which will shed light on some of the long-term structural changes in the economy and these studies will help to provide a starting point for the study proposed.

4. Manpower requirements for a mobilization economy

The problems involved in developing policies for training, education, recruitment, staffing of defense industries, military service in the utilization of military reserves, occupational deferment, etc., require information on the manpower requirements of a mobilization economy and the potential labor supply—in total, by industry, and for each significant occupation. Among the types of studies that need to be undertaken to provide this information are the folowing:

(*a*) Developing data on the changing relationships of the manpower input to product output in defense and other essential industries under mobilization conditions.

(*b*) Developing data on the way in which management in each industry adjusts the workweek to meet production needs under mobilization conditions.

(*c*) Developing data and improving existing data on the occupation composition patterns of individual industries. This includes obtaining more up-to-date patterns for industries in which selective changes have taken place recently; obtaining additional occupational data; and obtaining data on the way in which occupational patterns change, both in the short term under the impact of changes in the level and character of production and the changes resulting from longer terms, technological and institutional factors.

5. Occupational mobility

Information on the patterns of mobility of the labor force—the manner in which workers enter occupations and change occupations, move from one industry or part of the country to another—is relevant to the analysis of occupational manpower supply and to various economic conditions including those of defense mobilization. Studies are needed on:

(*a*) The flow of workers into an occupation, e. g., through apprenticeship, college education, vocational education, and in-plant training.

(*b*) The loss of workers from various occupations resulting from shifts to other occupations, marriage, and other factors.

(*c*) Geographical and industrial changes made by workers.

6. Seasonal adjustment factors for use with employment and labor force data

Recent experience of the Bureau and other Government agencies in attempting to analyze current developments in employment and unemployment have highlighted the importance of accurate information on seasonal fluctuations. The development of seasonal adjustment factors for selective industry employment series and for the unemployed and the total labor force is essential. Seasonal factors need to be developed also for the workweek in many industries.

7. Characteristics of the unemployed

As a basis for public policy with respect to employment and unemployment, more information is needed on the characteristics of the unemployed. Studies would be helpful on such questions as the industrial attachment of the unemployed by age and sex and by duration of unemployment.

8. Tables of working life

These tables, which have now been completed for men, reflect the impact of death and retirement rates upon the labor force at each age level and are essential in the assessment of occupational replacement needs and are relevant to the study of problems of retirement and pension plans. Tables of working life need to be developed for women and for specific occupations which differ markedly from the average with respect either to mortality or to retirement payments.

9. Employment problems of older workers

The growing importance of older persons in the population and in the labor force accentuates the employment problems of this group. Among the studies which would assist in the formulation of public policy and in the development of personnel policies in industry are:

(*a*) Productivity of workers by age.

(*b*) Accident and absenteeism rates by age.

(*c*) Comparative costs of insurance by age, including workmen's compensation, health insurance or medical care programs and pension programs.

(*d*) Employment opportunities for older workers in specific occupations and industries to be made in connection with occupational outlook studies of those fields of work.

(*e*) Expenditure patterns among families which include primarily older persons.

10. Analysis of factors affecting demand in research and technological oriented occupations

Critical manpower problems in the sciences have received wide attention in recent years and the necessity for developing techniques for projecting future demands in this unique group of occupations has been recognized. A series of basic studies of the factors affecting the demand in research, and engineering occupations would provide this information.

H. STATISTICS IN THE SERVICE OF ACCIDENT PREVENTION, WORKMEN'S COMPENSATION AND REHABILITATION OF INJURED WORKERS

It is in the public interest and, therefore, a direct responsibility of Government to foster and promote safety in industry, not only through the enforcement of safety laws and regulations but also by stimulating, encouraging, and assisting employers and workers of industry in the development of safety programs of broader scope than mere compliance with such laws and regulations.

It is equally a direct responsibility of Government to foster and promote the provision of adequate and effective economic security for those workers whose earnings and personal financial reserves are depleted or impaired because of work accidents.

Acceptance of these responsibilities implies the obligation to develop an informed public opinion as to policy in regard to governmental and private activities in the fields of accident prevention, workmen's compensation, and rehabilitation of injured workers. The development of such informed public opinion and the development of effective procedures for carrying out the resolved policies is entirely dependent upon the availability of accurate and comprehensive information regarding the magnitude of the work-injury problem.

In its many ramifications, an accurate appraisal of the work-injury problem requires extensive information regarding: the current volume of work injuries, their nature, and their seriousness; the current trends in work-injury occurrence; the causes and methods of preventing work accidents; the costs of work accidents to the workers, to employers, and to the economy; the extent to which workmen's compensation insurance is available and the adequacy of the benefits provided; and the extent to which rehabilitation is provided and the degree to which rehabilitation procedures are successful.

Specifically, the minimum informational needs in these subject areas and the degree to which those needs are currently met are as follows:

Needs	*Currently available*
Work-injury volume: National. State. Industry.	National estimates of total volume by major industry group. Accuracy of industry group totals varies widely. Practically no industry totals available. State totals available for very few States.
Injury rates—measures of injury occurrence and severity—the basis for comparisons and determination of trends: National. State.	National rates of reasonable accuracy and scope available for manufacturing and for a few nonmanufacturing industries. State data available for very few States.
Accident causes and methods of prevention.	Limited amount of data available for a small number of industries and occupations. Many of the available data are inadequate in scope and detail.

Needs—Continued	*Currently available—Continued*
Accident costs:	
(*a*) To injured workers.	(*a*) Practically none.
(*b*) To employers.	(*b*) Some very questionable estimates based upon untested and restricted surveys.
(*c*) To the economy.	(*c*) None of any validity.
Compensation insurance:	
(*a*) Workers covered.	(*a*) Very limited and spotty. No national data of significance.
(*b*) Effectiveness of administration.	(*b*) Very limited data of general nature. Most available reports are ex parte and are restricted in scope.
(*c*) Adequacy of benefits.	(*c*) Practically none.
Rehabilitation:	
(*a*) Extent available.	(*a*) Very limited data.
(*b*) Percent of potential cases treated.	(*b*) Practically none.
(*c*) Administration.	(*c*) Limited ex parte reports only.
(*d*) Effectiveness.	(*d*) Limited ex parte reports only.

The most urgent needs for information in relation to work injuries include:

1. More extensive injury-rate data in State breakdowns to supplement the national rates currently available. For some States this can be accomplished through a pooling of Federal and State activities in joint surveys. In many States, however, the objective can be achieved only through direct expansion of the Federal program.

2. More detailed analyses of work-injury experience in terms of operations, occupations, age, and sex of workers, plant size, working hours, and environment.

3. More detailed analyses of the sources of work injuries, for example, in respect to the sources of occupational diseases to identify the toxic possibilities associated with new materials used in industry.

4. Analyses of the injury experience of individuals to establish or refute current theories of accident proneness.

5. Extended analyses of accident causes as contrasted with analyses of injury sources.

6. Analyses of permanent disability cases to determine the production and economic losses resulting from specific types of disability.

7. Analyses of the effectiveness of in-plant medical services and/or organized safety programs as factors in reducing the frequency and severity of work injuries.

8. Development of accident cost data, such as the gross cost to industry, to the injured workers, and to the economy.

9. Development of national data relating to workmen's compensation, such as the number and kinds of workers covered; the number and the occupations of those excluded from coverage; the total cost of workmen's compensation, and the total amount of benefits paid; the average awards for specific types of disability; and the adequacy of awards in terms of the economic loss to the injured worker and his family.

10. Development of data concerning the subsequent activities and earnings of permanently disabled persons to assist in establishing adequate policies in respect to rehabilitation or cash awards.

11. Analysis of the effectiveness of joint labor-management safety programs and of the functioning of employee safety committees.

12. Establish a research and special services unit to develop new and improved procedures of compiling and analyzing injury and accident statistics; to conduct special studies on subjects associated with but not covered by regular continuing studies; to assemble, appraise, and maintain reference files of injury and accident data compiled by private, State, and Federal organizations; to provide more adequate responses to requests for information; and to provide technical consultation services on injury and accident statistics to the States and other Federal agencies.

I. FOREIGN LABOR CONDITIONS RESEARCH

During the postwar years, the need for research on foreign labor issues has grown immensely. Among the many reasons for this growth are the continuous extension of the geographical areas subject to United States policies and operations, the growing significance of the labor factor in all continents, its strategic importance in the worldwide struggle with communism, and the new devices developed for this struggle in the fields of foreign trade, foreign aid, technical assistance, and public information. Knowledge and understanding of foreign and international labor issues for these purposes is indispensable.

The program as presently constituted undertakes the task of collecting, analyzing and maintaining comprehensive information on labor conditions, labor laws, and labor institutions in a limited number of significant foreign countries, and on international labor activities and organizations. The program consists of preparing reports and analyses and rendering any other informational services needed for policymaking and operational activities in the foreign and international labor field, and for the clarificaton of domestic labor issues.

In the face of this increasing need for research on foreign and international labor conditions, resources have progressively decreased. At present the principal gaps in the program may be stated as follows:

1. Preparation of labor surveys for underdeveloped countries, especially of labor factors affecting overseas operations of United States firms.

2. Studies of labor conditions, productivity, and labor costs abroad in their relevance to foreign trade.

3. Studies on labor's status and workers' morale in Eastern Europe and Red China.

4. Extension of geographical coverage of foreign labor conditions research.

Labor surveys in underdeveloped countries are especially urgent for use by United States investors abroad who have actual plant operations in foreign countries or who consider expanding facilities or opening new operations. At a recent meeting, industrial relations representatives of 15 of the largest United States corporations with overseas interests indicated emphatically their very practical need for specific concrete and practical information on labor regulations and practices abroad. Nowhere in the United States Government is adequate information on this subject currently compiled and made available to representatives of labor and industry. Clearly, this kind of research is consistent with the widely accepted administrative policy of encouraging United States private investment in underdeveloped countries as a form of economic aid.

In the case of research of labor aspects relevant to the foreign trade problem, the need for information will increase steadily as changes in foreign economic policies of the United States necessitate new negotiations on trade and tariff matters, regardless of the legislative position taken by the Congress.

The current global political and economic events foresee an increase rather than decreasing interests in acquiring a knowledge of internal problems pertaining to labor in Russia, its satellites and Red China. Present facilities are inadequate especially with reference to Red China and most of the European satellites. The most recent event pointing up this need was the accession of Russia and two of its satellites to membership in the International Labor Organization. This event brought an immediate request from the United States delegation for full information on policies and practices within the Soviet Union on the four substantive agenda items for the June International Labor Organization Conference.

In connection with the extension of geographic coverage, it may be noted that the following regions, each including numerous and largely different countries, are each covered by one analyst only: Soviet Russia and all European satellites (as noted above); Latin America; Asia, with the exception of India and Pakistan, but including Far and Middle East. The continent of Africa, continuously growing in importance to the United States, is not covered at all.

Another gap that has implication for the foreign labor research program is the absence of adequate, consistent, and reputable bases for making international comparisons of wage trends, price movements, and changes in employment and unemployment. The program involves a high degree of cooperation between United States agencies and international units, such as the Statistical Division of the International Labor Organization and the United Nations. The mere publication of statistics from many countries on a given subject does not consti-

tute a satisfactory basis for international comparisons because of the wide differences in standards and methodology among countries. Currently, the agencies involved are performing useful services along these lines, but a much more thorough, extensive, and scientific job is needed.

J. STUDIES OF INTERINDUSTRY ECONOMICS

Studies of interindustry economics are needed for analyzing the effects on the total economy and on the utilization of the labor force of changes in: (1) production techniques, (2) the economic situation of 1 group of industries or 1 group of consumers, and (3) Government economic policies (e. g., as regards provision of funds for public-works projects, lowering or raising tariffs, allocation of raw materials for defense production, etc.). Furthermore, interindustry analyses are required for testing the feasibility of alternative mobilization plans and gaging the manpower and other economic impacts of economywide programs.

Complete interindustry studies should be conducted as materials become available from new censuses of manufactures and business and, in the intercensal periods, to bring them up to date periodically with data from other sources.

Interindustry studies have appeared sporadically in the past 15 years as an outgrowth of specific interest by various Government agencies. The most recent, that for 1947, was motivated by the need for developing tools and data for analyzing the impact upon the industrial sectors of the economy of alternative military procurement and mobilization programs. These data have been adjusted in limited fashion for various purposes to provide greater currency for some of the industry studies and to achieve more flexibility and reliability in using an interindustry model to answer questions affecting the whole economy. The Defense Department, the major sponsor of recent research in this area, has withdrawn its support. Hence, work by the Bureau of Labor Statistics and other agencies has been halted and, despite the importance of this analytical tool, there are no resources available for resumption of work in this field.

The multipurpose nature of interindustry accounts makes them peculiarly suitable as a framework for judging the internal consistency and completeness of practically all national economic statistics. Furthermore, the need for consistency in portraying the interrelationships among industries is in itself an aid in reconciling data from diverse sources and in estimating many of the missing pieces. During the course of the 1947 study of interindustry relations it was necessary to examine, select, and process parts of practically all the current economic statistical series of the Federal Government; it was also necessary to obtain auxiliary information from trade associations, companies, private individuals, technical books and journals, and scattered documents (both published and unpublished).

In developing these data it became evident that the most serious gaps in industry data arose on the expense side. Though production figures were often missing or conflicting, depending on the purpose of their collection, it was usually possible to get fairly reliable measures of output from one of the standard sources. Problems in the construction area are especially worthy of mention, for the study of the several construction sectors (some 26 or more) in the 1947 study revealed that the level of many current series on construction statistics did not accord with other estimates—particularly those bearing on the disposition of numerous important construction materials. Given fairly firm figures on the distribution of such materials to the construction sectors, it was necessary to revise the total expenditure levels for several series.

This illustration indicates the means by which interindustry data can be used to supplement and fill in the existing system of Federal statistical intelligence. The large number of purposes which are served by such data makes it desirable to establish and maintain this research on a continuing basis.

K. GENERAL ANALYSIS OF LABOR ECONOMICS

Analysis of data on the labor situation in the United States is handicapped by lack of material by 4-digit industry breaks, and for certain types of statistics, even data for all 3-digit industries within the manufacturing group. Understanding of problem industry situations is almost impossible without material for segments of the industry. Although sample figures are available on employment in all nonagricultural industries, the gaps in our coverage of nonmanufacturing industries, particularly in the service industries, make it impossible to provide data for average hours and earnings and, in fact, for our overall series on nonagricultural workers.

There has been a considerable improvement in the Bureau material available by locality, but many current programs still do not provide adequate figures by locality.

For certain types of analysis there are wide gaps because of the lack of materials comparable to those for the continental United States on the labor situation in Alaska, Hawaii, and Puerto Rico. Labor statistics for the rapidly developing economy of Alaska are almost entirely lacking. The Congress has not appropriated money for the quinquennial study of labor conditions in Hawaii, required by law, since 1947, nor are funds available to include the Territory in the regular statistical work of the Bureau. Representatives of important groups in Hawaii have stated that there is a considerable need for a complete coverage of the Territory in the Bureau's current program of labor statistics. The Commonwealth of Puerto Rico has made striking improvements in its statistical program in the last few years, but there are still gaps in its labor statistics.

The noncomparability of statistics on foreign trade with those on employment and production in effect amounts to a gap. Foreign-trade statistics are tabulated to show imports and exports in relation to tariff schedules. On rare occasions, funds have been supplied to the Bureau of the Census to enable them to retabulate these statistics by SIC groups. The lack of a regular flow of data on imports and exports on a basis comparable with other economic data produces two sets of problems: One connected with attempts to analyze the total impact of foreign trade on employment in the United States economy, and one connected with analyses of employment and wage levels in connection with the production of particular commodities.

In addition, staff is too small for making full use of materials for analyzing the implications of the data collected by the Bureau for the total labor situation of our economy or for the labor situation in problem industries or areas. This means that it is impossible adequately to service the Joint Committee on the Economic Report, individual Members of Congress, and officials of the administration, with information on the meaning of the figures the Bureau collects. Such analyses are required as part of the Bureau's work if it is to be effective in assisting them in the policy decisions which they must make.

DEPARTMENT OF LABOR,
BUREAU OF EMPLOYMENT SECURITY,
Washington, D. C., July 15, 1954.

Mr. STUART A. RICE,
Assistant Director for Statistical Standards, Bureau of the Budget,
Executive Office of the President, Washington, D. C.

DEAR MR. RICE: Mr. Ewan Clague recently sent me a copy of the statement on deficiencies and gaps in the Bureau of Labor Statistics program, which he had forwarded to you in connection with the hearings of the Subcommittee on Economic Statistics of the Joint Committee on the Economic Report. As its title indicates, Mr. Clague's summary was limited to material relating to BLS programs and did not reflect the experience of the employment-security system in dealing with employment and unemployment problems. As you know, this Bureau and its affiliated State employment-security agencies are directly concerned with promoting employment stability, facilitating the employment and job-placement process, and providing protection through unemployment insurance to involuntarily jobless workers. In the course of these operations, the employment-security system develops a considerable body of economic information relating to manpower and employment-security activities. Nevertheless, there are certain important gaps in the information needed for the purposes of these programs. In addition, we believe that we should organize and present the information obtained as a byproduct of employment-security operations in ways which will contribute most effectively to its use by other public agencies and by private organizations.

We believe that the gaps in information now available on manpower and employment-security activities should be called to your attention in connection with the work of the congressional Subcommittee on Economic Statistics and have prepared the enclosed statement for this purpose. I hope that you will find it useful in your work with the subcommittee and in other efforts of the Budget Bureau to fill the gaps in our present manpower-information resources.

Sincerely yours,

ROBERT C. GOODWIN, *Director.*

Gaps in Economic Statistics Relating to Manpower Utilization and Employment-Security Objectives

Introduction

The gaps in currently available information can only be evaluated in the light of the basic questions which the information is needed to answer. In the fields of manpower and employment security, these questions naturally cover a broad range because of the important role of manpower resources in all of the Nation's economic activities. Despite the scope and variety of purposes to be served by manpower information, the major questions can perhaps be stated in fairly simple and clear-cut terms:

1. How well are the Nation's manpower resources currently being utilized?
2. How effectively are we achieving the goals of maximum production, purchasing power, and employment set forth in the Full Employment Act of 1946 and the related goals of the employment-security program?
3. To what extent are we meeting current needs for manpower?
4. What steps should be taken to improve the quality of our manpower resources and their utilization?
5. What measures are necessary to assure balance between manpower requirements and resources in the future? In case of mobilization?

These are, of course, only the principal categories of questions and they imply many other related questions. For example, evaluation of current use of manpower resources depends not only on information on all workers combined but also on the utilization of such individual groups of workers as women, older persons, and members of minority groups.

Some information is now available to provide at least partial answers to almost all of the major questions. The following statement of gaps is therefore presented mainly in terms of the types of information now available and their limitations.

A. Employment statistics

1. *Geographical coverage.*—Statistics on nonagricultural employment are now available on a current basis for the Nation as a whole (Census and BLS), all States (joint BLS-BES-State agency program) and 149 major areas (joint program for 96 areas and employment-security labor-market reports for remainder). With a greater time lag, more comprehensive statistics are available from State unemployment-insurance reports and the Bureau of Old-Age and Survivors Insurance for each State and for all counties or other small geographical areas. The principal gap in geographical coverage of nonagricultural-employment statistics is the lack of current statistics for additional local areas. Improved sources of "benchmark" information for employment not covered by social-insurance programs are also needed on a State and area basis.

Statistics on agricultural employment are considerably more limited. National total figures are available on a current basis from the Census Bureau's Monthly Report on the Labor Force and estimates by the Agricultural Marketing Service. The latter data, based on a sample of 15,000 to 20,000 farmers, also include estimates for 9 broad geographical regions in the country, with separate figures for family and hired workers. Estimates of employment of seasonal hired workers are compiled by State employment-security agencies on a semimonthly basis during the active season for major agricultural employment areas, largely on the basis of information obtained in the course of farm-placement activities of local employment offices. A major gap in current employment statistics is therefore the absence of comprehensive information on agricultural employment by State and area. The long-term downtrend in the agricultural labor force, together with recent shortages of workers for some types of agricultural activities, emphasizes the need for additional information on this subject.

2. *Industrial coverage.*—Some extension may be desirable in the degree of industrial detail now available, although progress along these lines depends in considerable degree on improvement in industrial-classification practices, particularly with respect to establishments engaged in more than one type of activity. The finer breakdown of establishment-employment data would hardly seem worth while, however, so long as each multi-industry establishment must be classified solely in terms of its major activity.

3. *Characteristics of employed workers.*—The only current information now available on this score consists of the limited data available on employment of women, which is compiled by the Census Bureau on a national basis, by the BLS on a quarterly basis, and by State employment-security agencies (for major

areas) on a bimonthly basis. Adequate evaluation of the use of women in the work force would require extension of the statistics on female employment to the same coverage as current total employment data, and this in turn depends upon supplementing the benchmark data with a sex breakdown.

No information is currently available, except from very limited special studies and infrequent census reports, on employment of members of minority groups, physically handicapped persons, youth, and older workers. Efforts to improve utilization of these groups of workers could only be soundly based if information were available from time to time on the extent to which they are currently employed in various industries and areas.

Except for the data from the decennial census and the very broad categories shown in the Census Monthly Report on the Labor Force, virtually no information is available on the occupations in which workers are employed. This kind of information is basic for such purposes as employment counseling and planning for mobilization. During the Korean war, information on current employment in a few occupations in metalworking industries was obtained in connection with the joint current employment statistics program. In a few States, the employment service has obtained information from establishments on employment by occupation and has developed some occupational pattern data. Similar data are available from occupational wage surveys conducted by the BLS and some State employment-security agencies. Despite these various efforts, there is still room for vast improvement in this area of employment statistics. Studies would also be useful to compare current utilization of workers by occupation with their occupational training and qualifications.

4. *Time reference base for employment statistics.*—All of the currently available data refer to the employment level in a specified period, such as the calendar week containing the 8th of the month (Census current estimates) or the pay period ending nearest the 15th of the month (establishment statistics). For this reason, the data now available miss any significant changes in employment which occur during the month but outside of the specific reference period used. In addition, the significance of present employment statistics is limited because no distinction is made among employed persons on the basis of the number of hours which they worked (except for the national figures in the Monthly Report on the Labor Force). Thus, these employment statistics do not measure partial employment or underemployment, even for the specific period covered. Data on underemployment on an annual basis are virtually nonexistent, except for a few special studies.

5. *Size of firm distribution.*—Analysis of employment trends by size of firm is pertinent to such problems as determining the reasons for employment and unemployment changes, the promotion of small businesses, and the direction of services provided by public-employment offices. Very little information is currently available on this subject except for the BLS studies, conducted as part of the joint current employment-statistics program, of trends in metalworking establishments during the Korean war. The basic data for comprehensive studies could be obtained from the reports of monthly employment figures included in the quarterly contribution returns of employers subject to State unemployment-insurance laws (although a time lag of 5 to 6 months would be involved). Administrative-funds limitations have made it impractical to run such tabulations from these records.

6. *Studies of employment changes.*—In connection with efforts to promote employment stability, comprehensive studies of employment trends could provide valuable clues to the reasons for employment declines, particularly those that are noncyclical. Most State unemployment-insurance laws provide for such studies, but sufficient funds have not been available to finance them in recent years. For the purpose of such studies, these employment-security systems could draw not only upon current-employment estimates and covered-employment data but also on information growing out of operation of the unemployment-insurance program, such as insured-unemployment data and statistics on employer-experience rating systems. These studies would also be valuable adjuncts to the actuarial studies required in connection with financing unemployment-insurance-benefit programs and assuring solvency of benefit reserves.

B. Unemployment statistics

1. *Geographical coverage.*—No geographical distribution is obtainable from the estimates of total unemployment prepared by the Census Bureau. Estimates are available from State employment-security agencies for some 20 States and 149 major areas on a bimonthly basis, but additional work is needed to improve the validity of these estimates. These estimates start with the figures on insured

unemployment and make allowances for such excluded groups of unemployed workers as new entrants, persons laid off from noncovered establishments or industries, and those who have exhausted their benefit rights. While considerable progress has been made in improving these estimates, further improvement is needed and would be aided by special studies (such as analysis of the current labor-force status of persons who have exhausted their benefit rights) and by periodical preparation of "benchmark" estimates for individual areas on the basis of the Census household sample type of survey.

Additional work should also be done to permit more exploitation of the unemployment data represented by the records of job seekers at local employment offices, including both benefit claimants and other applications. This is the primary source of unemployment information in other Western nations.

2. *Characteristics of unemployed workers.*—Evaluation of unemployment data's significance and the development of measures to reduce unemployment depend upon detailed information regarding the kinds of workers who are unemployed. Aside from the broad categories of data available from the Monthly Report on the Labor Force, the only source of such information consists of the reports growing out of the employment-security operations. At present, regularly prepared reports in the employment-security system provide only a breakdown by sex for insured unemployment and by sex and veteran status for all job seekers. Some States also submit voluntary reports on previous industrial attachment of unemployment-insurance beneficiaries. The only employment-security source of duration of unemployment (except overall averages) covers the number of weeks of benefits received by claimants exhausting their benefit rights.

Our information on characteristics of unemployed workers could be significantly broadened by full exploitation of the information in employment-security records. If adequate funds were available, these records could be tapped for statistics on such characteristics as occupation, industry, age, sex, veteran status, marital status, race, physical-handicapped status, and length of unemployment for all job seekers at public employment offices and for benefit claimants. These data could be obtained not only for the Nation as a whole but for individual States and areas. The last such survey of job seekers at public employment offices was conducted in April 1950.

To measure adequately the quality of protection afforded to involuntarily unemployed workers by unemployment insurance would require considerable data over and above what is now available. The major gap is probably the lack of usable data on the weekly wages of beneficiaries. This is needed to measure more precisely the extent to which the current level of benefit payments compensates for the wage loss of claimants. More extensive data are also needed as a basis for legislative decisions on maximum duration of benefit rights and on the eligibility, disqualification and experience-rating provisions of State unemployment insurance laws.

3. *Unemployment due to sickness or injury.*—Workmen's compensation data throw some light on the significance of work-connected injuries or illnesses as factors responsible for diminution of manpower resources, income and purchasing power. Some limited information is available for nonoccupational illnesses from the administrative statistics on the operation of the temporary disability insurance programs now in effect in four States. For the most part, persons who would otherwise be in the labor force but who are idled because of injury or illness are not considered as unemployed even though they undoubtedly represent a sizeable dent in manpower resources and income levels. The MRLF count of employed persons who are temporarily ill is a single national estimate. This is therefore a field related to unemployment statistics in which very little information is now available as a basis for public understanding of the problem and formulation of policies to cope with it.

C. Hours and earning statistics

Some comments have already been made on hours and earnings data in preceding sections of this statement. More meaningful data on hours of work are needed, for example, to evaluate gross employment data and the extent of underemployment. Improved individual earnings data are needed, as stated above, in judging the adequacy of unemployment insurance benefit rates and also for many other purposes relating to analysis of income levels and purchasing power. Valuable data on hours of work and earnings are of course currently produced by the BLS, including its monthly report on employment and earnings and occupational wage surveys. Similar information by industry is also turned out by State employment security agencies participating in the joint CES program, providing statewide totals by industry and corresponding data for major areas. All

State employment security agencies also report total wages subject to unemployment insurance on the same basis as the covered employment statistics already mentioned.

However, none of these sources adequately covers earnings of individual workers, and the information on wages by occupation is much too limited to meet real needs for the data. These needs extend into several phases of employment security operations, including employment counseling, plant location assistance, and determinations of suitable work in connection with job offers to unemployment insurance claimants.

D. Labor turnover and absenteeism

Monthly labor turnover rates are published by industry and sex for manufacturing activities in the Nation as a whole every month, and the labor market reports submitted to the BES for 149 major areas every other month also contain turnover data for manufacturing. The sample coverage of the BLS program is too limited to provide the detailed data needed by State and area. Considerable improvement could be effected in the coverage and accuracy of turnover data, which are important measures of job stability and essential tools in employment security administration. Facts on labor turnover provide measures of potential workload both in the claims taking and placement operations of local employment offices. A breakdown of new hires information to indicate the kinds of workers being hired (such as their distribution by age, occupation or physical handicapped status) would furnish invaluable guides to the programing of placement assistance for the groups of jobseekers that are more difficult to place as well as a worthwhile supplement to information for counseling of youth.

The extent of manpower wasted as a result of absenteeism is virtually unknown, although some information on the subject was collected during World War II as a part of manpower mobilization activities. Here is an area of information in which the gap is wide, and its closing could be quite helpful in formulating manpower policies and planning personnel practices.

E. Labor demand and supply

Sound data on manpower requirements and resources are essential for many purposes both in peacetime and in times of mobilization. Short-term employment requirements are now collected regularly from major employers by all local employment offices and are summarized on a bimonthly basis for the 149 major areas covered by the regular labor market reporting program of the employment security system. Some estimates of manpower requirements are compiled by the BLS from production and related data and through consultation with trade associations or similar organizations.

Current indicators of labor needs and available workers can also be found in the operating records of the employment security system, including job openings listed with local offices, openings which have been placed in interarea clearance and job applications. Reported regularly during the Korean war, overall job vacancy counts (whether or not listed with the public employment service) are still maintained by some State employment security agencies and, besides, their administrative uses, have significance for evaluating the current adequacy of labor supply and the frictions interfering with its full utilization.

However, it is undoubtedly in this field of information on current and, even more particularly, on future labor demand and supply that we are confronted with one of the most serious gaps calling for expansion of our informational base. Planning of vocational training programs, employment counseling and vocational decisions, recruitment activities, plant location, mobilization planning and many other activities in the manpower field all should be governed by reasonably accurate facts regarding manpower requirements and resources. Such information is important by industry, occupation and area. Needed are estimates not only of available labor supply already in the labor force but also of the potential labor supply represented by persons not now in the labor force. Mobility data, especially by occupation, are also required in analyzing the relationship between labor demand and supply. (While marked progress has been made in recent years in efforts to standardize industrial classification and coordinate code assignments for individual establishments among various agencies, differences in occupational classification systems have not received the same attention and persist despite the widespread use of the USES Dictionary of Occupational Titles.)

Intensive work needs to be undertaken in the development of techniques for producing this kind of information with a view toward establishing the regular flow of improved statistics on manpower requirements and resources at the earliest possible date.

ADVISORY COMMITTEES TO FEDERAL STATISTICAL AGENCIES

Lists of nongovernmental advisory committees to some of the principal statistical agencies, with names of the committee members, are presented below. In addition to the committees listed here, there are many other formal and informal arrangements in use by Federal agencies to obtain advice from the business community or other interested persons on the development and maintenance of their statistical programs. For example:

The *Board of Governors of the Federal Reserve System* has a variety of working arrangements and cooperative relationships with different groups and individuals in connection with the statistics that fall within its sphere. The types of relationships are tailored to fit the particular circumstances, and the nature and extent of consultation and review varies according to requirements in individual cases. In the course of a major revision, such as was completed last December for the index of industrial production, there is extensive communication and discussion with outside experts. The new annual production indexes and plans for monthly indexes developed during the course of the recent revision were mailed for comment to more than 600 representative individuals and organizations, and the replies received were of value in improving the work.

The *Business and Defense Services Administration* in the Department of Commerce has 554 advisory committees which serve as vehicles for consulting industry on all problems, including statistics, in specific industrial areas. The membership of these committees is selected to give representation to large, medium and small companies, as well as to geographic distribution.

The *Office of Business Economics* meets four times a year, for advice on all phases of its work, with the technical consultants of the Committee on Economic Policy of the Business Advisory Council of the Department of Commerce—a representative group of business economists. OBE also obtains advice and assistance from various technical groups with which it meets. Staff members of the Balance of Payments Division, for instance, meet four times a year with a balance-of-payments group from the National Foreign Trade Council to survey developments in this field and provide for mutual assistance. Similarly, the national income work of OBE has the benefit continuously of consultation and advice from the Conference on Research in Income and Wealth, which is sponsored by the National Bureau of Economic Research, the pioneer in the national income field.

The *Bureau of Mines* in the Department of the Interior consults representatives of specific industries and trade associations in planning the content and collection methods of its commodity surveys. During the last 6 months it has obtained such advice, in each case from representatives of a number of companies or trade associations concerned, for surveys of aluminum scrap, bituminous coal, cement, coke and coke chemicals, copper scrap, iron ore, lead and zinc, petroleum, stone and sand and gravel, and tin.

BUREAU OF THE BUDGET

The Bureau's Office of Statistical Standards relies heavily on consultation with other groups in its work toward coordination and improvement of Federal statistical activities. Toward this end it has established a number of interagency committees to work on specific problems in areas of mutual concern. In addition to these governmental groups it also obtains advice and assistance from nongovernmental sources, primarily through the following three committees:

AMERICAN STATISTICAL ASSOCIATION ADVISORY COMMITTEE ON STATISTICAL POLICY

William G. Cochran (chairman), Johns Hopkins University, Baltimore, Md.
Walter E. Hoadley, Jr., Armstrong Cork Co., Lancaster, Pa.
Howard Jones, Illinois Bell Telephone Co., Chicago, Ill.
Isador Lubin, economic consultant, New York, N. Y.
William F. Ogburn, University of Chicago, Chicago, Ill.
Frederick F. Stephan, Princeton University, Princeton, N. J.
Willard Thorp, Amherst College, Amherst, Mass.
Ralph J. Watkins, Dun & Bradstreet, Inc., New York, N. Y.

Samuel J. Wilks, Princeton University, Princeton, N. J.
Executive Secretary, William J. Carson, National Bureau of Economic Research, New York, N. Y.

ADVISORY COUNCIL ON FEDERAL REPORTS

American Chamber of Commerce Executives

Parker Hill, Cleveland Chamber of Commerce, Cleveland, Ohio
William H. Press, Washington Board of Trade, Washington, D. C.

American Retail Federation

Myron S. Silbert, Federated Department Stores, Inc., New York, N. Y.
Quaife M. Ward, American Retail Federation, Washington, D. C.

American Trade Association Executives

T. E. Veltfort, Copper & Brass Research Association, New York, N. Y.
Merrill A. Watson (vice chairman), National Shoe Manufacturers Association, New York, N. Y.

Chamber of Commerce of the United States

R. Buford Brandis, Chamber of Commerce of the United States, Washington, D. C.
Edmund R. King, Eastman Kodak Co., Rochester, N. Y.

Controllers Institute of America

Lisle W. Adkins, AVCO Manufacturing Corp., Cincinnati, Ohio
E. E. McConnell (chairman), Norton Co., Worcester, Mass.

National Association of Manufacturers

Karl J. Ammerman, Borg-Warner Corp., Washington, D. C.
John C. Gebhart, National Association of Manufacturers, Washington, D. C.

National Industrial Council

Walter A. Knerr, Manufacturers' Association of Montgomery County, Pa., Norristown, Pa.
John H. Seeton, Pennsylvania Manufacturers' Association, Philadelphia, Pa.

Members-at-large

Preston B. Bergin, Retail Jewelers Tax Committee, Inc., Washington, D. C.
W. G. Bourne, Jr., Commonwealth Services, Inc., New York, N. Y.
T. M. Brennan (treasurer), National Association of Manufacturers, New York, N. Y.
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DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

Because the Bureau of the Census is a central statistical service agency and because many of its statistics are intended for wide public use, it has constantly endeavored to maintain close contact with the persons and agencies outside the Bureau having a knowledge of the needs as well as the problems of collecting and publishing statistics. The Bureau depends to a very large extent on voluntary cooperation from the public in securing its statistics, and it has consistently endeavored to collect its statistics without resorting to those mandatory powers which it possesses.

The Bureau has found that advisory committees, including a wide range of business and professional interests, as well as a wide geographic representation, have been very useful. They assist in the continuing evaluation of the data collected and published by the Bureau and they render valuable assistance in selecting the most essential from many suggestions for additional data which the Bureau receives. Since they include representatives of the persons who would supply the data, they are aware of the records which may be available as sources of information and of the workload which a request for information would place on the respondents. Their awareness of these matters has made them reluctant to ask for more information than can be readily supplied by business or the public. They offer useful advice in reducing the burden of necessary inquiries to the respondents. Because they represent a diversity of interests and groups, they frequently assist in interpreting the needs for and uses of the data to be collected and, thus, increase the degree of voluntary cooperation.

The advisory committee representing the broadest range of interests is that appointed by the American Statistical Association. This committee normally includes members with special competence in each of the major fields of activity of the Bureau. This committee advises the Director on matters of general policy and serves to coordinate recommendations which come from the more specialized committees. It meets about four times a year.

Some census advisory committees are appointed by the associations which they represent. The committees of the American Marketing Association, and the American Retail Federation have been active over a long period of years, and have concerned themselves especially with the census of business and with current business statistics. The American Political Science Association has also appointed an advisory committee.

There is also a continuing Census Advisory Committee on State and Local Government Statistics, appointed by the Director in consultation with interested agencies and groups.

In the foreign trade field, the Bureau makes use of a group of industry and Government advisory committees on the classification of export commodities, as well as interagency committees on commodity classification and statistical regulations.

At the time of a major census, advisory committees are appointed to give more detailed consideration to the specialized problems which arise in relation to that

census. At the time of a census of agriculture, for example, the farm organizations, the agricultural publishers, State agricultural commissioners, land-grant colleges, and the Department of Agriculture are invited to designate representatives to an advisory committee for that census. There is now such a committee concerned with the 1954 census of agriculture.

During the planning and conduct of the 1950 census program, a number of technical advisory committees were appointed by the Director to deal with population statistics, economic statistics in the census of population, housing statistics, and residential financing. Each committee consisted of 10 to 15 specialists representing business groups, research groups, Government groups, and other groups with an interest in the statistics to be produced.

From time to time the Bureau also works with special advisory groups which concern themselves with special programs which the Bureau is considering or has under way; for example, the preparation of the report "Historical Statistics of the United States," the preparation of census monographs, the development of intercensal housing statistics, and the establishment of urbanized areas for use in the 1950 census.

A special committee now functioning is the Advisory Committee on Employment Statistics appointed by the Secretary of Commerce to evaluate the procedures used by the Bureau of the Census in estimating employment and unemployment.

Another special group was the Intensive Review Committee, appointed by the Secretary of Commerce, composed of outstanding experts in statistical fields and charged with the responsibility of making a critical appraisal of all the programs of the Bureau of the Census. Its final report was submitted in February 1954.

In addition to the special advisory groups, the Bureau makes extensive use of committees established by the Office of Statistical Standards of the Bureau of the Budget. Through that office the Bureau has access to the Advisory Council on Federal Reports which has a major role in certain of the reporting programs, particularly in manufacturing and distribution, and to the Labor Advisory Committee on Statistics and the Advisory Committee on Statistical Policy.

There is consultation with users and suppliers of data in the preparation of any major reporting program. The work done in recent years to prepare for the censuses of manufactures and business illustrates this process. In planning for both of these censuses, a systematic effort was made to assure that every national trade association and a large number of trade journals had an opportunity to review drafts of proposed reporting forms and to make suggestions for their improvement. A sample of individual business concerns, including all of those which had specifically requested an opportunity to review census forms, was also included in the review program. In connection with the census of business planned for 1953, letters concerning the 1953 plans were sent to 498 trade associations, including all the national associations and more than 300 trade papers. Responses were received from nearly half of these. In addition, meetings were held with more than 90 associations. Many individual companies were also consulted.

For the census of manufactures planned for 1953, the 200 separate schedules required to show commodity detail were extensively cleared with a total of about 3,900 business representatives. About two-thirds of these were manufacturing companies; most of the remainder were trade associations.

Attached are membership lists for some of the more important of the currently or recently functioning Census Bureau advisory committees.

Census Advisory Committee of the American Statistical Association

Chairman, Frederick F. Stephan, Department of Economics and Social Institutions, Princeton University, Princeton, N. J.

Dr. Murray R. Benedict, Giannini Foundation of Agricultural Economics, College of Agriculture, University of California, Berkeley, Calif.
John W. Boatwright, general manager, distribution economics department, Standard Oil Co. of Indiana, Chicago, Ill.
Dr. Donald R. G. Cowan, professor of marketing, School of Business Administration, University of Michigan, Ann Arbor, Mich.
Howard Whipple Green, Howard Whipple Green & Associates, Cleveland, Ohio.
Arnold J. King, president, National Analysts, Inc., Philadelphia, Pa.
Dr. J. E. Morton, National Science Foundation, Washington, D. C.

Dr. Donald S. Thompson, vice president, Federal Reserve Bank of Cleveland, Cleveland, Ohio.
Dr. Ralph J. Watkins, director of research, Dun & Bradstreet, Inc., New York, N. Y.
Dr. Frank Welch, dean and director, College of Agriculture and Home Economics, University of Kentucky, Lexington, Ky.
P. K. Whelpton, Scripps Foundation, Miami University, Oxford, Ohio

CENSUS ADVISORY COMMITTEE OF THE AMERICAN MARKETING ASSOCIATION

Chairman, Henry O. Whiteside, director, public relations and advertising, Mercantile Trust Co., St. Louis, Mo.

Robert T. Browne, director of marketing, grocery products division, Pillsbury Mills, Inc., Minneapolis, Minn.
Charles S. Coles, United Shoe Machinery Co., Boston, Mass.
James S. Cross, assistant professor, Massachusetts Institute of Technology, department of business and engineering administration, Cambridge, Mass.
William Dover, Los Angeles Examiner, Los Angeles, Calif.
Dr. N. H. Engle, bureau of business research, College of Economics and Business, University of Washington, Seattle, Wash.
Henry C. George, Standard Oil Co., Cleveland, Ohio.
Howard Whipple Green, Howard Whipple Green & Associates, Cleveland, Ohio.
Albert Haring, professor of marketing, School of Business, Indiana University, Bloomington, Ind.
Dan Hopkins, American Weekly, Chicago, Ill.
Richard M. Lawrence, development department, Monsanto Chemical Co., St. Louis, Mo.
C. S. Logsdon, professor of marketing, School of Business Administration, University of North Carolina, Chapel Hill, N. C.
Vergil D. Reed, vice president, J. Walter Thompson Co., New York, N. Y.
R. C. W. Sadler, associate director of research, J. L. Hudson Co., Detroit, Mich.
Arthur I. Sternhell, Metropolitan Life Insurance Co., New York, N. Y.
John R. Stockton, director, bureau of business research, College of Business Administration, University of Texas, Austin, Tex.

CENSUS ADVISORY COMMITTEE OF THE AMERICAN RETAIL FEDERATION

Chairman, Myron S. Silbert, vice president, Federated Department Stores, Inc., New York, N. Y.

William Girdner (representing Institute of Distribution), assistant to the president, Melville Shoe Corp., New York, N. Y.
Perry Meyers, Allied Stores Corp., New York, N. Y.
Q. Forrest Walker, economist, R. H. Macy & Co., Inc., New York, N. Y.
Charles W. Rivoire, W. T. Grant Co., New York, N. Y.
Leo J. Heer, National Retail Furniture Association, Washington, D. C.
C. H. Lovell (representing Limited Price Variety Stores Association, Inc.), F. W. Woolworth Co., New York, N. Y.
Theodore Grape (representing American National Retail Jewelers Association), Grape & Co., Washington, D. C.
Warren A. Clohisy, Mail Order Association of America, Washington, D. C.
Thomas J. Golden, National Association of Chain Drug Stores, New York, N. Y.
Wallace N. Flint, National Association of Food Chains, Washington, D. C.
Earl Campbell (representing National Association of Music Merchants, Inc.), Campbell Music Co., Washington, D. C.
Louis Rothschild, executive director, National Association of Retail Clothiers & Furnishers, Washington, D. C.
Raymond F. Copes (representing National Retail Dry Goods Association), manager, Controllers' Congress, New York, N. Y.
W. R. Noble (representing National Retail Farm Equipment Association and National Retail Hardware Association), Washington, D. C.
Paula Smith, National Stationery & Office Equipment Association, Washington, D. C.
William J. Cheyney, National Foundation for Consumer Credit, Washington, D. C.

Irvin E. Douglas, executive vice president, Retail Paint & Wallpaper Distributors of America, Inc., St. Louis, Mo.
Joseph T. King (representing National Retail Tea & Coffee Merchants Association), Washington, D. C.
B. N. Burnstine (representing National Jewelers Association), Washington, D. C.

CENSUS ADVISORY COMMITTEE OF THE AMERICAN POLITICAL SCIENCE ASSOCIATION

Chairman, Dr. Arthur N. Holcombe, Department of Government, Harvard University, Cambridge, Mass.

Dr. E. Allen Helms, Department of Political Science, Ohio State University, Columbus, Ohio.
Dr. Claudius O. Johnson, Department of History and Political Science, State College of Washington, Pullman, Wash.
Prof. Earl G. Latham, Department of Political Science, Amherst College, Amherst, Mass.
Dr. Edward H. Litchfield, executive director, American Political Science Association, Washington, D. C.
Joseph D. McGoldrick, New York State Rent Administrator, New York, N. Y.
Dr. James K. Pollock, chairman of the department of political science, University of Michigan, Ann Arbor, Mich.
Dr. Edgar Eugene Robinson, professor of American history, Stanford University, Stanford, Calif.
Richard M. Scammon, Chief, Division of Research for Western Europe, Department of State, Washington, D. C.
George W. Snowden, special representative, division of employment security, Louisiana Department of Labor, Baton Rouge, La.
Dr. Luther Gulick, executive director, Mayor's Committee on Management Survey, New York, N. Y.
Pendleton Herring, president, Social Science Research Council, New York, N. Y.

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David M. Ellinwood, manager, municipal department, Moody's Investors Service, New York, N. Y.
Roger A. Freeman, special assistant to the Governor, Executive Department, State of Washington, Olympia, Wash.
Arnold Frye, attorney, Hawkins, Delafield & Wood, New York, N. Y.
Leslie M. Gravlin, director, Governmental Research Institute, Inc., Hartford, Conn.
Dr. Luther Gulick, city administrator, New York, N. Y.
Randy Hamilton, Washington office director, American Municipal Association, Washington, D. C.
Dr. James W. Martin, Director, Bureau of Business Research, University of Kentucky, Lexington, Ky.
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Victor Hawkins, director of research, Capper Publications, Inc., Topeka, Kans.
J. Albert Hopkins, secretary-manager, Farmers Educational & Co-operative Union of America, Little Rock, Ark.
Earl Houseman, United States Department of Agriculture, Washington, D. C.
Lester S. Kellogg, Deere and Co., Moline, Ill.

James L. Moore, State master of the Arkansas Grange, Seligman, Mo.
John J. Riggle, secretary, National Council of Farmer Cooperatives, Washington, D. C.
Dr. John F. Timmons, department of economics and sociology, Iowa State College, Ames, Iowa.
Dr. F. J. Welch, dean of College of Agriculture and Home Economics, University of Kentucky, Lexington, Ky.

ADVISORY COMMITTEE ON EMPLOYMENT STATISTICS

Chairman, Frederick F. Stephan, Department of Economics and Social Institutions, Princeton University, Princeton, N. J.

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BUREAU OF LABOR STATISTICS

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Paul H. Norgren, economist and research assistant, Industrial Relations Counselors, Inc., New York, N. Y.
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Theodore E. Veltfort, manager, Cooper and Brass Research Association, New York, N. Y.
Merrill A. Watson, executive vice president, National Shoe Manufacturers' Association, Inc., New York, N. Y.
Cedric Wolfe, research associate, business research bureau, Metropolitan Life Insurance Co., New York, N. Y.
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American Federation of Labor

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Bert Seidman,[1] research staff, American Federation of Labor, Washington, D. C.
George W. Brooks, research director, International Brotherhood of Pulp, Sulphite & Paper Mill Workers of United States and Canada, Washington, D. C.
Lazare Teper, research director, International Ladies' Garment Workers Union, New York, N. Y.
David Kaplan, economist, International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America, Washington, D. C.
(Vacancy)

Congress of Industrial Organizations

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Mrs. Katherine P. Ellickson,[1] associate director of research, CIO Department of Education and Research, Washington, D. C.
Solomon Barkin, research director, Textile Workers Union of America, New York, N. Y.
Otis Brubaker, research director, United Steelworkers of America, Pittsburgh, Pa.
Nat Weinberg, research director, United Automobile, Aircraft, Agricultural Implement Workers of America, Detroit, Mich.
Mrs. Sylvia Gottleib, research director, Communications Workers of America, Washington, D. C.

[1] Member of standing committee.

Milton Fried, research director, Amalgamated Clothing Workers of America, New York, N. Y.

Railway Labor Executives' Association

George Cucich,[1] research director, Railway Employees' Department, Chicago, Ill.
(Alternate: Albert S. Epstein, economist, International Association of Machinists, Washington, D. C.)
Carl Huhndorff, research director, International Association of Machinists, Washington, D. C.
Ray J. Westfall, research director, Order of Railroad Telegraphers, St. Louis, Mo.
Frank L. Noakes, research director, Brotherhood of Maintenance of Way Employes, Detroit, Mich.

Representative TALLE. Now we are delighted to hear from Mr. Donald R. Belcher.

You may proceed in your own way. May I ask, would you like to complete your statement before you are interrogated?

Mr. BELCHER. Preferably, yes. But I would not have any objection if anybody cares to raise a question as we go along. Whatever seems most expedient to you.

Representative TALLE. My coworkers are reasonable people, and I am sure we will get on very well.

Will you proceed, Mr. Belcher?

STATEMENT OF DONALD R. BELCHER, ASSISTANT DIRECTOR, BUREAU OF THE BUDGET, ACCOMPANIED BY STUART A. RICE, ASSISTANT DIRECTOR FOR STATISTICAL STANDARDS, BUREAU OF THE BUDGET, AND PEYTON STAPP, ASSISTANT CHIEF, OFFICE OF STATISTICAL STANDARDS, BUREAU OF THE BUDGET

Mr. BELCHER. I am very happy to be here, sir, and to be here to speak for the Director of the Bureau.

Your subcommittee has invited the Bureau of the Budget to discuss the statistical activities of the Federal Government and the need and means for their improvement. Our interest in this area is reflected, as you know, in the Federal Reports Act of 1942 and the Budget and Accounting Procedures Act of 1950 under which the Bureau of the Budget is charged with responsibility for the coordination and improvement of Government statistics.

The Employment Act of 1946—an enactment of major significance—established the Council of Economic Advisers in the Executive Office of the President and the Joint Committee on the Economic Report in the Congress, thereby creating essential instruments for the study of overall economic conditions and trends of our modern world and the adaptation of public policy thereto. Reliable statistics are obviously of basic importance for the implementation of the act.

Your letter of April 28, Mr. Chairman, requesting the Director of the Bureau to supply information about economic statistics and statistical programs of the Federal Government, outlined a series of topics for discussion and included a number of specific questions. Our reply, consisting of a report prepared by our Office of Statistical Standards, was delivered to you on July 1. I shall not undertake

[1] Member of standing committee.

here, of course, to discuss details of the material in that report. There are a number of broad observations, however, which I should like to offer for your consideration.

In general, we have assumed agreement on the needs for and uses of statistics in a free society and have not attempted in this report to justify Federal expenditures for statistics or to spell out fully the needs for statistical information. Moreover, in view of the responsibilities of your committee, we have directed our attention specifically to the major fields of economic statistics, in contrast to statistical activities which are primarily the tools of administrative and regulatory functions within the Federal Government.

Our report refers to some of the uses made of specific series, and the staff memoranda appended to it include descriptions of the historical developments of the series described. However, a comprehensive study of the requirements for and uses of economic statistics is undoubtedly needed. It would certainly be helpful if the committee should decide to prepare for the Congress and general use as precise a statement as possible of the needs of government and of private enterprise—business, agriculture and labor—for statistical data; not only for administrative and operating purposes, but also as necessary aids in promoting high-level employment and economic stability and growth. The data needs of organizations and individuals engaged in research on business fluctuations and on the development of economic science might also be analyzed.

As we see it, there are three general classes of users of statistics: Government officials, for public purposes; citizens, for their private affairs; and scholars, for research and theoretical studies. Although particular requirements may differ, the statistical needs of these groups coincide to a large extent in the area of general economic analysis.

The Government needs facts on which to base decisions regarding policies affecting the welfare of the Nation and its people. Every member of the Cabinet and agency head has responsibilities which require him to know how his program is operating and whether changes are needed. The Council of Economic Advisers and the Joint Committee on the Economic Report, from their beginnings, have been concerned with the data needed to carry out their responsibilities under the Employment Act of 1946. In its first report on the President's Economic Report, the joint committee stated:

> The basic problem which this committee has to consider is the method of preventing depressions so that substantially full employment may be continuously maintained * * * It involves a study of price levels and wage levels and their relation to each other, a study of methods of preventing monopoly control in industry and labor from distorting prices and wages, a study of spending for consumption and for capital investment, a study of individual and corporate savings, and a study of many other economic factors bearing on a stable economy.

All of such studies require reliable statistical data. Mr. Burns will speak this afternoon, I believe, on how adequately our present statistics meet the Council's needs in assisting the President to analyze economic trends and formulate economic policies.

Of equal importance in a free economy, private citizens—in business, agriculture, and labor—need factual information to guide their actions and decisions. Certain basic elements of this information have and should come from the statistical services of the Federal

Government, because only government can obtain the data needed. As Charles E. Wilson, then president of General Motors, testified before the Joint Committee on the Economic Report in 1947:

> Accurate knowledge of the current level of production, demand, and inventories of all major commodities at the various levels of the economic process—manufacturing, wholesaling and retailing—is essential. It is clearly a proper function of government to assist in the collection and publication of such business statistics. Obviously, we must have accurate information of this nature to assist producers and consumers in appraising the market.

The third important group of users of statistics are the scholars and research workers. From their efforts comes a clearer understanding of economic processes and trends. Statistical descriptions of the economy are necessary for their analyses. The basic relations between theory and statistics were well described by Wesley Mitchell, in his classic volume on Business Cycles, published in 1927 by the National Bureau of Economic Research:

> Statistical analysis affords the surest means of determining the relations among and the relative importance of the numerous factors stressed by business-cycle theories. In turn, rational hypotheses are the best guides of statistical research, and theoretical significance is the ultimate test of statistical results. Aside from the limitations of investigators or of their resources, the line commonly drawn between statistical and theoretical work has no justification.

We have come a long way since 1927 toward closer integration of statistical and theoretical work, and wider recognition of the fact that the two areas are interdependent.

In just a few sentences let me summarize the role of the Federal Government in providing economic statistics. Article 1 of the Constitution requires a decennial count of the number of persons in each State, and the decennial census of population has continued to add questions on the characteristics of the people. The first census of manufactures was taken in 1810. Our crop reporting services started in 1840. Foreign trade data exist from the beginning of the Republic. The Government throughout the years has provided more and more economic information. It is not a function to be defined once for all time. As conditions change, new kinds of information are needed; as knowledge grows, new depths of understanding bring to light new needs. The Federal Government's role is to provide that economic information which it alone has the resources, the authority, and the prestige to assemble.

There is no doubt that we have far more statistics and, in many areas, far better statistics than we had 20 or 30 years ago. The fact is, of course, that we need more and better statistics now than we did then. The country has grown and changes in the economic structure of the country have continued to make greater the interdependence of all of us on each other. As these needs for statistical information have increased, the role of the Federal Government in providing them has also become larger and that trend is likely to continue. At the same time, in its function of promoting the national economy, the Federal Government should also encourage and utilize to the maximum possible extent the statistics collected and made available by private organizations. Many privately collected series of data are now used by the Government and by private groups other than those who produce them, a practice which will doubtless be expanded as

more private series of high quality become available. We believe that this development should be encouraged to the end that the Federal Government will not itself assume responsibilities that can more properly and more economically be borne elsewhere.

I shall not try to summarize our judgments upon the adequacy of Federal statistics, but a few words may be useful in highlighting the type of comments we have made in our report.

First, we believe more attention should be paid to the importance and utilization of benchmark data. Most current economic series are derived from sample surveys and supply reasonable estimates of month-to-month changes. However, all continuing sample surveys are subject to deterioration, and it is necessary to have periodic benchmarks to which the current series can be adjusted in order to maintain their accuracy and efficiency. The three major sources of benchmark economic data are: (1) the quinquennial censuses of manufactures, business, mineral industries, and agriculture, and the decennial censuses of population and housing; (2) the tabulations known as statistics of income made from tax returns; and (3) administrative records of the Bureau of Old-Age and Survivors Insurance.

Second, we believe that a number of current statistical series, although they serve admirably a limited range of interests, require expansion to provide the greater detail needed for modern uses. The few new series needed to fill gaps might also be included in this category.

Third, we believe that some current series have become inadequate for uses to which they are now put and should be strengthened. The inadequacy of these series does not imply criticism of the agencies responsible for their preparation. It usually results from the fact that uses of the data have outgrown the original intent behind the series, and resources have not been available to revise the series to achieve the level of accuracy now needed.

As to budgetary policy in relation to statistical programs, I should like to quote from our report as follows:

> The subcommittee has asked the Bureau to identify the most needed statistical improvements; and these are specified herein. But not all desirable objectives are attainable within a given period of time. If every plan for development were limited to items thought to be immediately within reach, planning itself, except in a hand-to-mouth sense, would be impossible. The program of improvement set forth in this report is to be regarded as a chart of objectives toward which the Federal Government may hope to move as rapidly as circumstances and other competing demands upon it permit.

I do not believe there is anything more I can usefully say on budgetary aspects. There are many claims on the resources of the Government which must be weighed against each other and against the exigencies of the time. The administration believes in the need for comprehensive and reliable statistics reflecting the economic conditions of the country. Every member of the Cabinet and every head of an independent agency will give sincere consideration to the needs for improvements in our statistics, but will have to weigh these and determine their relative priority with respect to other needs. I would expect to see some statistical improvements provided for in the 1956 budget—but I would not expect to see provisions for all the improvements which will be suggested to you, in our own report and in other testimony.

I appreciate this opportunity to appear before you and thank you for your attention.

Representative TALLE. The committee appreciates your statement, Mr. Belcher.

Mr. BELCHER. Thank you.

Representative TALLE. Now there are a number of questions we should like to ask. The Chair has several. They are not necessarily his own questions, but they are questions which have been suggested to the chairman, in part, at least.

At the outset, is there a need for the development of an overall Federal program in economic statistics?

I think I ought to combine that with another question, and ask you, Why can we not have a single statistical agency?

Mr. BELCHER. I wondered whether that was the question that was coming next.

That debate as to whether we should have a central statistical agency doing all the statistical work of the Federal Government is old. I suspect it may be older than I am. I have heard it debated for 25 years, at least.

I do not know how we would start, if we were starting fresh, whether we would have that kind of setup or not. I might say first, of course, that as I understand that proposal, it does not contemplate the inclusion of administrative statistics, for example, the tax returns that the Bureau of Internal Revenue gets. It would not make any sense to have those collected by somebody else, because they have a regulatory and enforcement function to carry out. Similarly, the statistics collected by the Bureau of Old-Age and Survivors Insurance, the millions upon millions of returns that come in to them. It would be ridiculous to have them collected by somebody else. In other words, all the departments and agencies that have administrative and regulatory functions to carry out and collect statistics merely as a tool of that regulation or enforcement, there would certainly be no justification in separating the statistical collection from them and putting it in a central place.

Now, if you come down to the agencies that are primarily concerned with collecting economic statistics from the public, for example, the Bureau of the Census and the Bureau of Labor Statistics—and there are 2 or 3 other groups that do similar work of collecting statistics which are not directly related to their enforcement responsibilities—there might be some argument for centralization. My own view is that the argument is on the other side. The argument for it, of course, would be that there might be better coordination.

There might be some economies through a centralized provision as contrasted with each bureau having its own. I think that gets down to the question of relative efficiency with size. The size of such an operation would be almost staggeringly big, in my view, and I think we are getting probably better efficiency and better coordination with the system we have today, where each bureau has its own responsibilities. And then, together with that, we have an Office of Statistical Standards that is charged with responsibilities for the coordination of programs, that is, the better designing of programs, the better integration of programs, as between the agencies.

I think that mechanism is probably more effective than a centralized statistical agency would be.

Then I might point out also, in the year since I have been down here with the Bureau, I have observed, myself, a good deal of competition among those agencies, and I think that is very healthy. If one bureau can think up some better ideas for statistical collection or statistical processing or statistical interpretation than the other bureau, that is very healthy competition, and I think we get more of that under this system than we would under a centralized system.

That is a long speech, but that is my best answer.

Representative TALLE. A good one.

Mr. BELCHER. Thank you.

Representative TALLE. Congressman Bolling.

Representative BOLLING. If the chairman will yield, I was interested in the question of the Budget and Accounting Act of 1950, and I just wondered if in connection with what you have just said, and assuming your decision as to the kind of coordination required—that which we have now—is correct, is the law adequate for that purpose?

Mr. BELCHER. In my opinion, it is. As I say, I have been here only a year, and I might modify that on advice of my associates. But my own judgment would be that it is.

Do you agree with that?

Mr. RICE. I agree.

Representative TALLE. I think it was Longfellow who said that things are not always what they seem, and when you mention the economy aspect of it, I recollect that the chief executive of one of our States some years ago found that pathology was taught at the university and also at the agricultural school, and he decided that both human pathology and animal pathology might better be taught in one of them instead of both, so as to save money. The plan did not work well.

Senator Carlson?

Senator CARLSON. I have just been following with interest your response to the questions of the chairman and Congressman Bolling.

As I understand it, the Bureau of the Budget has the responsibility, through legislative acts, of coordinating statistics.

Mr. BELCHER. Yes, sir.

Senator CARLSON. What about your liaison between various agencies of the Government? I assume that you get statistics from Agriculture and Commerce and Labor and maybe many other agencies. How long does it take you to get them, is there delay?

Mr. BELCHER. In our office, the Bureau of the Budget, we do not undertake to collect statistics or bring statistics in from these agencies. Our job is more of a coordinating function. We have specialists on our staff who are technically very familiar with statistics in a particular area. For example, in Agriculture we have people who are specially qualified in the problems associated with agriculture statistics, and so on across the Government. Now, those people on our staff are closely in touch with the corresponding specialists in each of those agencies, and help them in their programing and their planning, and then we have committee arrangements whereby certain specialists from around the Government who are interested in a common problem meet.

We also have committee arrangements through which outside representatives appear, outside people, business representatives, labor

representatives, and agricultural representatives, who deal with particular problems and coordination.

We do not undertake in the Bureau to bring statistics centrally into our place.

Senator CARLSON. In your statement this morning, you stated:

> The Federal Reports Act of 1942 and the Budget and Accounting Procedures Act of 1950, under which the Bureau of the Budget is charged with responsibilities for the coordination and improvement of Government statistics.

The point I want to bring out is that if this coordination is not being carried through, if economic statistics are not being prepared as rapidly and efficiently as they could be, how should we try to improve the present system. Do we need new legislation? What can we do as a committee to assist the Congress to bring about improvements in the collection of statistics and in their dissemination?

Mr. BELCHER. So far as the Bureau is concerned, coordination, in my judgment, does not mean bringing the statistics into a central place. The statistical operations of the Federal Government are effective when the Bureau of the Census gets its statistics out accurately and promptly and interprets them correctly.

The Bureau of Labor Statistics gets its statistics out to the public. They do not flow through the Bureau. That would be an interference and a resultant delay. They flow directly to the public as soon as those agencies have collected their statistics.

Now, I think by and large that those statistics are collected promptly and are released promptly, and are interpreted well. When you get down to the details, there are particular spots where I think the process could be speeded. The data could be released more promptly than they are. But that is an operation on which the Bureau has been pushing for a good many years, and the agencies themselves.

Very often it comes down to a question of money. It may be more expensive to do this job in a short space of time than it is to spread it over a longer interval. That may be a question of money.

In very many cases, that collection is done through voluntary cooperation of independent businesses or individual citizens. In the case of voluntary cooperation, it is sometimes difficult to put the pressure on and get response promptly. So delays sometimes are due just to the fact that the response to the statistical questions is a voluntary response rather than obligatory.

Senator CARLSON. You use the words "putting pressure on to get statistics." Is the Bureau of the Budget in a position under the present standards to exert some pressure on these agencies to hasten the collection of statistics?

Mr. BELCHER. Yes, sir.

Senator CARLSON. Do you have adequate authority?

Mr. BELCHER. Yes, sir; and we have done that, sir.

Senator CARLSON. Are there any of these statistical programs that, in your opinion, are unnecessary and could be eliminated? I do not care to have you mention names.

Mr. BELCHER. I would say, in a very broad answer to that, no. You see, in all these years, as these various series of statistics have grown up, they have come under, first, the scrutiny of the agency or department head, who is not going to put them in unless he thinks their use is justified, because he has to get money to operate them.

Then the Bureau of the Budget takes another look at them, and I think through that process unnecessary collection has been cut down. And then when the Bureau of the Budget is finished with it and the President has finished with it and sent up his budget to Congress, then we have the House Appropriations Committee in the House and the Senate Appropriations Committee in the Senate all passing judgment on these things.

So my conclusion on these things would be that there is nothing of any great magnitude that could be eliminated, that what is in there is there in response to a registered need.

Now, when you get down to details, a good many things have been dropped in the past and I think they can be in the future. I think that is a gradual process.

Senator CARLSON. Having had some experience in the Bureau of the Budget in trying to get some appropriations for projects which we need, I think you are doing a good job.

Mr. BELCHER. Thank you, sir. Thank you very much.

Representative TALLE. It is also true, is it not, Mr. Belcher, that the Bureau of the Budget has the authority to restrict wide-scale requests for reports and questionnaires? I had something to do with a hearing and the enactment of a law on that back in 1939 and 1940. Up in the right-hand corner of Government reports and questionnaires since that time is a statement that gives significance to this law. If the report is approved by the Bureau of the Budget, well and good. If it is not, the people who are asked to reply do not have to answer it. Is that not right?

Mr. BELCHER. Yes, sir. That act has been of great influence and very great economy, not only to the poor businessman who was deluged with inquiries, but also the Federal Government itself, in not bringing in and processing unnecessary statistics. As a businessman, I recall the day when we were flooded with requests, and very often duplicating requests, from different agencies of the Federal Government, with slightly different slants to the question, so that you could not give them a carbon copy of your return. Business was harassed.

Now, since the setting up of that act and the authority given to the Bureau of the Budget, that has been very much reduced. If an agency thinks it needs certain statistical information that requires a questionnaire going out to the public, that is reviewed by us to see whether some other agency is not getting substantially the same information. If it looks as though that request were justified, then the next problem is, if possible, to state the questions in such a form as to conform with the accounting practices of the industry that is going to respond. If the question is to be asked in such a way that the company merely has to look at its books, its income statement, or something else, and copy off a few figures, that is simple. If the question is inadvertently twisted to a point where it requires a large-scale investigation, then the industry probably will not answer unless it is under some compulsion.

So there again, the Bureau has been effective in bringing about the actual writing of the questionnaires to best conform with common accounting practices of the respondents.

That has been a very great contribution to the statistical service, both from the economical operation of the Federal Government and

in the direction of relieving business of unnecessary and unnecessarily complicated questionnaires.

Representative TALLE. I recall a glaring case out in West Virginia, where a businessman spent $800 for a CPA's service to answer a questionnaire which he thought was foolish in the first place, and he had no sooner sent that in than he got another one, and so he had to do it all over again, and the CPA found in the end that, after all, both requests were for the same purpose.

Mr. BELCHER. Yes.

Representative TALLE. But the questions were so indefinite that one could not recognize the purpose before the reports were completed.

Mr. BELCHER. That is right.

Representative TALLE. I imagine you have found that law to be a good one.

Mr. BELCHER. Very decidedly, sir.

Representative BOLLING. What responsibility does the Bureau of the Budget through its Office of Statistical Standards, have for doing essentially what this subcommittee is trying to do?

Mr. BELCHER. I am sure it has the responsibility, and I am sure the Bureau has been active along that line. I do not think it has the major responsibility. It seems to me a responsibility of this committee, and of such agencies as the Council of Economic Advisers, really to determine what it is that is needed in this area. Now, the Bureau can help in that direction——

Representative BOLLING. In other words, the Bureau's primary function is essentially a control and technical function?

Mr. BELCHER. I will say yes to that, except that I do not want to imply that we are not supposed to exercise imagination, ingenuity, and so forth.

Representative BOLLING. Of course.

Mr. BELCHER. And I am sure the Bureau has been effective in stimulating improvement in all these areas for the purpose of meeting known economic needs.

Representative BOLLING. Now, frankly, I have not had an opportunity to look into this in as much detail as I would like. What is the organization of the Office of Statistical Standards? Is it organized in such fashion that the various specialists which have been mentioned have a framework within which to work?

Mr. BELCHER. The assistant director in charge of the Office of Statistical Standards, as you know, is Mr. Stuart Rice, sitting here, and if you would like a brief description of his organizational setup, may I ask him to reply?

Representative BOLLING. Yes.

Mr. BELCHER. Thank you.

Mr. RICE. Mr. Chairman, the Office of Statistical Standards is a very small, and we think, highly competent body, of about 25 professional people and supporting clerical and secretarial services. We are not broken down into sections because we value above everything else maximum flexibility. We have specialists on our staff who are assigned problems which may involve interrelationships among the different statistical services and activities as they arise.

So the person who has a major responsibility in one problem may take a secondary responsibility in another problem. We deploy our personnel to the best advantage as these problems arise.

The problems are essentially those of coordination, by which I mean the establishment of effective interrelationships between the statistical activities of different Federal agencies.

As Dr. Belcher said, in answer to Senator Carlson, we do not collect information. We merely try to see that any information collected by any Federal statistical agency is collected with the maximum efficiency and with the maximum utility, to serve the maximum number of purposes.

In other words, when a proposal for a statistical survey comes to us for approval from one of the so-called operating statistical agencies, like the Census Bureau or the Bureau of Labor Statistics, or, let us say, one of the regulatory agencies in its own field, we immediately consider that proposal in the light, not of the needs of that agency alone, but of the needs of the entire Federal Government and the public: For instance, could this particular proposal be so broadened as to serve the needs that would otherwise call for a separate statistical inquiry by some other agency?

Representative BOLLING. At that point, sir, do you have adequate power in the Bureau of the Budget to enforce your decisions?

Mr. RICE. Our legal power is quite extensive. I should say, yes, sir, we do have the power. Legal power, when we are dealing with other statistical agencies, is something that has to be exercised with care and discretion. We never try to use all of the power which the law seems to give us. We would embroil ourselves in endless difficulties if we adopted an authoritarian attitude. We proceed by conferences, discussion, persuasion, and the cogency of our reasoning in gaining concurrence rather than by fiat or dictatorship.

Have I made myself clear, sir?

Representative BOLLING. Certainly.

I have nothing further, Mr. Chairman.

Representative TALLE. Dr. Belcher, in addition to your very fine statement which you read at the outset, the Bureau of the Budget supplied much additional material which I referred to earlier. The Bureau has examined the adequacy of existing statistics for use in general economic analyses under 14 subject headings. My question is, In which of these areas would it be most helpful for the subcommittee to start its detailed studies? We cannot do everything at once, and we would like to do the most important first.

Mr. BELCHER. I do not know that I am prepared to express a very firm judgment on that. I have been concerned in the last few weeks with this matter of construction statistics, on which there was a great demand for improvement, and on which the two agencies concerned, the Bureau of the Census and the Bureau of Labor Statistics, had plans for going ahead. And as a result of our work in that field, a request has recently gone up to the House for a supplementary appropriation in that field.

Now, there is a spot where we felt that very material improvement was necessary and could be justified, and if the Congress so determines, that job will go ahead promptly. I mention that because it happens to be fresh in my mind.

Now, if you want an overall judgment, I am not sure but what I would not like to yield either to Mr. Rice or Mr. Stapp.

Would you like to comment on that?

Mr. RICE. Mr. Chairman, as Mr. Belcher said a moment ago, we feel that the agencies which use statistics, like the Council of Economic Advisers, should acquaint us with their needs, that it is not our role to say what are the most important statistical series for their needs.

I would certainly place very high in my own judgment of needs the restoration of the nationwide economic censuses which are now pending. The legislation to authorize the industrial censuses and business censuses has been passed. The appropriations are now pending.

I would think that the improvement of construction statistics would perhaps be second in order.

There are a great many different areas which are described in this report where improvements are needed; I believe, sir, I would prefer to trust Mr. Burns' judgment as to what are most needed among those.

Representative TALLE. The Chair will state that this is a question that will be asked of Dr. Burns, and certainly will come up tomorrow, as to the use of such statistics, when we will be here for a panel discussion. But while we have you at our mercy, we thought we would like to ask you the question.

I recognize Dr. Ensley, director of the staff.

Mr. ENSLEY. Thank you, Mr. Chairman.

Dr. Rice was commenting on the status of the censuses of business, manufacturing, and so forth. And you emphasized in your statement the importance of these benchmark data.

Mr. BELCHER. Yes.

Mr. ENSLEY. What is the legislative status of the censuses at the moment? Do I gather that the authorizations have gone through and that appropriations are now pending? Is that the status?

Mr. BELCHER. That is as I understand it on that particular group of censuses. I think the census of agriculture has already been approved, that is, the appropriations.

Representative TALLE. That is correct.

Mr. BELCHER. I think that is correct.

Mr. ENSLEY. So the censuses of manufacturing and business——

Mr. BELCHER. That is correct. I think the appropriation is still pending.

Mr. ENSLEY (continuing). Are currently pending?

Mr. BELCHER. Yes.

Mr. ENSLEY. What is the status of the construction statistics program that you mentioned?

Mr. BELCHER. That is also pending so far as I know. It only went up to the House a week or 10 days ago, I think, and I do not know whether it has had any determination yet by the Appropriations Committee or not.

Mr. ENSLEY. But every effort is being made to expedite its legislation at this session?

Mr. BELCHER. That is right, in order to have it effective for the beginning of 1955.

Mr. ENSLEY. Last February during the course of our hearings on the President's economic report, there was considerable discussion about the adequacy and accuracy of our statistics on employment, unemployment and the labor force. Steps were taken at that time,

if you will recall, in improving those data. What is the current status of the work being done in the field to improve employment, unemployment and labor force statistics within the executive branch?

Mr. BELCHER. Of course, you are aware of the fact that we have brought about the coordination of the public release and interpretation of these figures, and thereby I think reduced some of the public misunderstanding, so that we now have three major series of data on employment and unemployment released simultaneously and interpreted in a document which brings them all together in their proper relationship. That has been accomplished.

Now you are asking, sir, about improvements beyond that.

Mr. ENSLEY. Yes.

Mr. BELCHER. Do you want to speak on that, Mr. Rice?

Mr. RICE. Mr. Chairman, one of the most significant undertakings is to reexamine the concepts of the labor force, employment, unemployment, and so forth, which are embodied in these various inquiries. That has been done from time to time over the years. It is being done again by an interagency committee in which the principal agencies concerned are represented. They are calling in testimony from the public users of the information to the end of getting general agreement upon what should be understood by employment, unemployment, and so forth.

The importance of a general understanding and agreement is indicated by the fact, as some of the testimony to which you referred brought out, that by changing the interpretation of unemployment, for example, you could change the figures by hundreds of thousands, or even more. So it is highly important to get a uniform and uniformly understood concept of the meaning of these terms before you start any count of those to whom they apply.

We have in the Department of Commerce, by appointment of Secretary Weeks, a committee which is examining in particular the methodology employed in the current population survey of the Bureau of the Census, which produces a monthly report on the labor force, as its principal figures in this field. That committee, made up of highly reputed experts, statisticians, from outside the Government, has been meeting, but has not yet brought out its report.

I might add that the new sample about which so much discussion was centered at the time it was adopted has shaken down, as it were. It is in full operation, and among the statisticians of the Federal Government, I think there is a general acceptance of its figures. It is as accurate as any agency with the existing resources could obtain.

Those are some of the current moves which are being made in this field.

Mr. ENSLEY. As of the moment, however, you do not see any limitations in this field due to inadequate legislation or appropriations?

Mr. RICE. Neither in this field nor in general do I see any needs for additional legislation to improve the data.

I think, sir, I could put it this way, that we have available to us whatever we want to pay for. If you want to gain increased accuracy in the sample, you can spend more money on it and obtain increased accuracy, and so on, all the way around. Improvements, then, have no definable limit. If you want something to be better, you can spend more money to make it better. But that introduces always the question of alternative uses of limited funds.

So I would say that the problems here are how much we can afford to spend to gain certain improvements in certain statistical series, in the light of competing demands for the same money elsewhere.

Mr. ENSLEY. That brings up the next point. How can we best budget our limited resources for statistics and other economic research. I have found very helpful the appendixes attached to your Budget Bureau statement, appendixes A and B, particularly, in bringing together in one place suggestions for improvements in the present program. I am wondering if it would be possible in the next annual budget of the President and subsequent budgets to include a special exhibit bringing together information on the present statistical programs and proposed changes in those programs. I would hope this committee could look at them from the standpoint of competing demands, and be in a position better to advise the Congress on those programs.

Have you given some thought to that?

Mr. BELCHER. We would like to give that consideration. I think it might be very helpful. Of course, we tend to resist anything that will add to the volume of the President's budget. We get complaints all around that it is much too large now, and that is the reason we are always reluctant to add anything new. But we ought to give that consideration, and we shall.

Mr. RICE. Could I add to that?

The question was asked a bit ago, what could your committee do here. There is one very difficult problem which is suggested by Mr. Ensley's question, namely, the extent of the general interest in statistics as compared with the particular agency's interest. We have, as Mr. Belcher indicated, a sort of competitive relationship among our individual statistical agencies, which is doubtless wholesome. But when confronted with a desire by a particular agency to extend its own statistical operations as compared with an outside demand upon us, to collect statistics for some outside purpose not related to the program of that agency, something which falls in between the interests or responsibilities of particular agencies, then there is nobody in particular to urge and defend that interstitial requirement for statistical data.

We attempt to do that, but the entire processes of submitting estimates and defending them by agencies before the Budget Bureau and before the Congress is conducive to the support of agency interest rather than general overall statistical interest. And it seems to me that your committee could undertake the task in many instances of representing their general overall need for statistics, just as the Council of Economic Advisers and the Office of Statistical Standards, to some extent, and to some extent ineffectively—because of their location in the executive branch rather than in the Congress—are able to take that role.

Mr. ENSLEY. Yes. I think that a compilation similar to those you have here in your appended materials would be helpful if it were tied into the annual budget each year. I hope that you will give that consideration.

I have another question or two here. Have you given any thought to a complete statistical reporting system for each, or identical firms? For example, various Federal agencies collect from the identical private business. Would it be possible to have a comprehensive type

of questionnaire or report form for the business to fill out so that it would be submitting one report rather than maybe a half dozen? That is a minor and technical question, but it has been posed to us, and I thought I would get your judgment on it.

Mr. BELCHER. May I turn that over to Mr. Rice, also?

Mr. RICE. Mr. Chairman, that proposal has been made many times in the past. It has been given a good deal of thought. In certain particulars, we have approached that sort of solution. But, in general, I would say that proposal is rather visionary, and not practical.

Mr. ENSLEY. One of the problems, I suppose, in connection with statistics is getting adequate appropriations. I would like to get your observations, Mr. Belcher, on the suggestion that has been made that the Federal Reserve Board, which has statutory authority to collect and analyze economic data needed for performing its function, might be in a position to expand its role as a collector and analyzer of economic statistics. With its independent financial resources, it might obviate some of the problems we have now with respect to financing. Do you have any observations on that?

Mr. BELCHER. I do not know whether that question has been explored or not. Of course, I would be reluctant to propose that the agency, because of its independent financial resources, take over work that clearly and financially is a function of the Federal Government. I mean, from a budgetary point of view, I would not want to be in a position of throwing costs over to them which really do not belong there. I think that might very well be explored. I would assume that the Federal Reserve Board has gone as far as it thought it should, in view of its own obligation. But what the facts are, I have never examined into them. I do not know.

Senator CARLSON. Right on that point, Mr. Ensley, I was visiting with a former member of the Federal Reserve Board recently, and he made that very distinct suggestion, and said that we were not using them to the best or greatest advantage, and that they did have the funds, and he thought that that was one place that the Federal Government should at least expand its operations and get information that is of vital concern, not only to the Federal Reserve itself, which is the agency that does follow very closely the economic situation, and he urged me personally to get into it, which I did not do.

I would recommend that you explore that, if you would.

Mr. BELCHER. In view of your statement, sir, we certainly shall take that up very seriously.

Mr. ENSLEY. Could I ask a couple more questions?

Representative TALLE. Yes. I have one that I would like to ask first.

Mr. Belcher, I can well understand that the Government might be loaded down with all manner of requests that would not have an overall value but rather limited significance. The Federal Reports Act was intended to solve the problem of ruling out requests on which you should not spend effort and money, problems that should be attended to by private persons or companies.

Mr. BELCHER. There again, I think, in view of my own limited experience, I ought to refer that question to Mr. Rice or some of his people.

Mr. RICE. Mr. Chairman, under the Federal Reports Act, to which you have referred, every proposal, with a few exceptions—the principal exceptions being tax forms and banking forms from the bank regulatory agencies—every proposed request for information from the public must be approved by the Office of Statistical Standards.

Now, in that process, we try very carefully to screen all of the proposals to eliminate those which do not appear to us to be justified, to reduce in scope those which are reducible in scope, to improve the format and understandability of the questions to be asked, and above all, to assure ourselves that the data are needed.

Now, in that process, sir, I think we successfully eliminate almost all of the unjustifiable inquiries of the public.

I might say that while the disapproval rate under the Federal Reports Act began at around 10 percent of all the proposals reaching us, it very soon diminished because the agencies became concerned with the question of making justification for their proposed inquiries and found it futile to apply unless they could be assured of our approval. So we have no accurate measure of the real effect of the Federal Reports Act in deterring unneeded and unimportant inquiries.

Representative TALLE. I am glad to know that the Federal Reports Act serves the purpose which the Congress intended it to serve.

I would like now to go to another point. How effective is sampling? Is it reliable as a guide?

Mr. BELCHER. The answer is, "Yes," if the sampling is properly designed. It is a highly technical operation. It is a special branch of mathematics in itself, and only those who are highly qualified in that area can design a sample on a scientific basis. When the sample is properly designed and properly applied, it is highly accurate, and normally it is possible to measure the probable error involved in the results that flow out of it. It is a modern development that is used very extensively by business organizations of all kinds, as well as the Federal Government, with enormous saving in cost, and very satisfactory results in point of time, because a sample census, properly designed, can be conducted in a very short space of time as compared to what we require for a complete census. So it is a highly constructive development in the field of statistics, I should say, that has come about within fairly recent times.

Representative TALLE. I understand, of course, that it depends on the nature of the sample.

For what uses do you think the sample would be least reliable?

Mr. BELCHER. I am having a little difficulty answering that. Your sample, of course, has got to have some point of reference. And that is why I have tried to stress, and Mr. Rice has, the importance of these periodic and complete censuses in manufacturing, and so forth, because your sample may be quite reliable as to month-by-month trends, and movements up and down, but it has to be checked once in a while. After a period of time it has to be checked against some more complete enumeration. That is why we have argued for these censuses at, say, 5-year intervals, so that your sample can carry on your month-to-month movement in between, but before it gets too far out of line, you have another complete census, and then you could make whatever adjustments are necessary.

Of course, your whole sampling in the field of such matters as unemployment becomes a little difficult because of the difficulty not in the sampling operation itself, but the difficulty of defining what is meant by "unemployment."

You get those difficulties in any place where the answer is not a finite, determinable fact, in the sense that it is a number or something else, but it reflects a judgment on the part of an individual. Then you get some inaccuracies which are not chargeable to the sampling operation at all. They are just due to the nature of the problem that you are trying to investigate.

Have I answered your question, sir? I am not quite sure.

Representative TALLE. Yes, you have, Mr. Belcher. I was disposed to carry it a little further, but not at this time.

Mr. Ensley?

Mr. ENSLEY. Just one more point.

What steps are being taken by the United States to cooperate with other governments to improve their internal statistics generally and the comparability of statistics between and amongst nations? I know, having been at Rome last September with Dr. Rice as delegates to the International Statistical Institute, that other countries are looking to the United States for leadership in this area as well as in other areas, and I am wondering whether perhaps you or Dr. Rice would mind outlining some of the steps that are being taken to improve economic statistics on a broader basis.

Mr. BELCHER. I will make a general statement and let Mr. Rice answer in more particular.

I am convinced that we have exercised, particularly in the last decade or so, very great influence in the statistical work of other countries, and in many instances I am sure that our own statistical work has been improved and aided by our own intimate knowledge of their operations.

I think the United States has, however, very distinctly shown leadership and particularly in connection with the work that Dr. Rice has been associated with. I think that leadership has been highly effective and generally recognized throughout the world.

Mr. Rice?

Mr. RICE. Thank you.

I would say the principal mechanism for international statistical collaboration is the United Nations through its Statistical Commission, which exercises a sort of advisory and planning, semijudicial function within the United Nations organization, and the Statistical Office of the United Nations whose monthly and annual reports have come to be front-page news on most of the leading newspapers of the world whenever they are published.

The United Nations has proceeded as rapidly as it could gain acceptance from the more or less developed countries in standardizing, for example, international trade classifications. It is impossible to compare the trade of one country with that of another if each uses its own classification of commodities.

The Statistical Commission has formulated a Standard International Trade Classification which has now been generally accepted or is being generally accepted by almost all the countries of the world which permit it then to assemble periodically trade data which are reasonably comparable from one country to the other.

Similarly, it has prepared an International Standard Industrial Classification which serves similar purposes of comparability. It has gone into many issues of that sort.

I might say that the other specialized United Nations organizations—such as ILO, FAO, WHO, UNESCO, and ICAO—within their own fields are similarly standardizing statistics in cooperation with the United Nations Statistical Office. We are developing a world system of statistics through those mechanisms. There are certain regional organizations as well which attempt to apply these general international standards within their own regions.

The regional organization which concerns us most intimately is the Inter-American Statistical Institute, which is a part now, by agreement, of the Organization of American States. It has a Committee on the Improvement of National Statistics, made up of the chief statistical officers of the 22 Western Hemisphere nations, including Canada. It has been seeking to standardize within the hemisphere the applications of these international standards formulated by the United Nations.

There are various professional organizations. Mr. Ensley, you mentioned one, the International Statistical Institute, whose functions in the improvement of international statistics are scientific rather than administrative. Altogether we are developing through these mechanisms an international statistical system.

Mr. ENSLEY. Thank you. That is all.

Representative TALLE. Mr. Belcher, I would like to ask what the present prospects are for improvement in the areas which the Bureau feels the committee should act first, getting back to the original part of my question.

Mr. BELCHER. I think, to give a broad general answer to that, the prospects are good. I tried to point out that these improvements cannot come about over night. I am not sure that they should. Each year, as the budget submissions are made by the departments and agencies, the people at the head of those departments and agencies have to decide in their own minds the kind of priority to assign to all kinds of problems that come within their jurisdiction, of which statistics is one area, and those, in turn, have to be considered in the review of the budget eventually by the President. Then we have a budget submisison to Congress, and then the procedure with which you are quite familiar continues.

I would suppose that this improvement in our statistical program will be a gradual one. As the need for new statistics, improved statistics is made apparent and the procedures for getting those statistics are determined, and the costs associated with getting them are estimated, gradually those things will be brought into the budget, and we will see improvement. I think that will be a gradual process, however, Mr. Chairman.

Representative TALLE. I am wondering if there are existing programs that we could get along without and probably spend more money and energy on other programs that are more important. Have you any suggestions along that line?

Mr. BELCHER. No; I would be very happy to have the committee investigate that particular question. As far as my own viewpoint is concerned, I doubt if there are any substantial economies that can

be obtained by the discontinuance of some statistical activity. If there are, we would like to know about them.

The review process that goes on in the executive branch first and later by Congress has pretty well foreclosed the existence, I think, of substantial statistical activities which are not justified from one point or another. The man who is interested in manufacturing may look down his nose at certain agricultural statistics. The agricultural statistician may wonder why statistics on some other area are collected. Each specialist just views his own field as the most important.

I think overall it is impossible that there are any substantial statistical activities which are not justifiable at the present time.

Representative TALLE. Is the Federal Government doing enough basic research in economics and statistical techniques; that is, do we really know how to make the improvements that we are talking about?

Mr. BELCHER. I think by and large we are making progress, and we are doing research. I think when it comes to research in economics and statistics, the Federal Government, of course, has only part of that burden. That is being done by the universities, it is being done by the various organized groups. As improvement in methodology, as new knowledge of economic theory are developed, new needs for statistical information are brought out, and those are communicated. The people working in that field, of course, are all closely in touch with the people in the universities, and the people elsewhere engaged in this whole research job. As improvements are proposed, the Federal Government has the benefit of them.

That is a very broad answer, but I do not think I can answer it very categorically. I think we have made progress, we are making progress, and we will continue to make progress in that field.

Representative TALLE. It appears that the morning session has come to its conclusion, and the committee is very grateful for the appearance of Dr. Belcher and Dr. Rice, and the Chair announces that this afternoon at 2:30, the witness will be Dr. Arthur F. Burns, who is Chairman of the Council of Economic Advisers to the President. It will be at 2:30 in this room, and it is an open hearing.

Thank you very much, gentlemen.

(Whereupon, at 11:30 a. m., a recess was taken until 2:30 p. m., the same day.)

AFTERNOON SESSION

Representative TALLE. The Subcommittee on Economic Statistics of the Joint Committee on the Economic Report will resume its hearing.

This afternoon we have as our witness the Chairman of the Council of Economic Advisers to the President, Dr. Arthur F. Burns.

On behalf of the subcommittee, I want to thank you, Dr. Burns, for the excellent statement you have prepared for the subcommittee. I am sure it will be very useful to us and to everyone interested in improving economic statistics.

The committee realizes that you have a very important and most difficult assignment. I might add it is given to few people to be endowed with the powers of mental integration required for such a task. There are many aspects to your work. The aspect which is most important to this committee is the assistance to the President in his preparation of the Economic Report.

Reference to the Employment Act of 1946 which makes provision for the Economic Report, illustrates the need on the part of the Council for adequate economic data. If I may quote from the act briefly as follows:

> The President shall transmit to the Congress after the beginning of each regular session, an economic report setting forth (1) the levels of employment, production, and purchasing power obtaining in the United States, and such levels needed to carry out the policy declared in section 2 of the act; (2) current and foreseeable trends in the levels of employment, production and purchasing power; (3) a review of the economic program of the Federal Government and a review of economic conditions affecting employment in the United States or any considerable portion thereof during the preceding year and of their effect upon the forthcoming production and purchasing power; and (4) a program for carrying out the policy declared in section 2 of the act together with such recommendations for legislation as he may deem necessary or desirable.

Dr. Burns, you may proceed in your own way. If you choose, there will be no interrogation until you have completed your statement.

Dr. Burns?

STATEMENT OF ARTHUR F. BURNS, CHAIRMAN, COUNCIL OF ECONOMIC ADVISERS

Mr. BURNS. Thank you, Congressman.

I submitted a written document which you have and to which you have referred very kindly.

Representative TALLE. That document, I may say, will appear in the record at this point, without objection.

(The prepared statement of Arthur F. Burns is as follows:)

EXECUTIVE OFFICE OF THE PRESIDENT,
COUNCIL OF ECONOMIC ADVISERS,
Washington, D. C., July 6, 1954.

HON. HENRY O. TALLE,
Chairman, Subcommittee on Statistics,
Joint Committee on the Economic Report,
Washington, D. C.

DEAR CONGRESSMAN TALLE: I am glad to reply to the request of your subcommittee concerning the adequacy of economic statistics from the standpoint of the needs of the Council of Economic Advisers in assisting the President to appraise economic trends and to formulate economic policies.

In this response we have not attempted to canvass all possible improvements in economic statistics, or to discuss the needs of other users of statistics. Nor have we endeavored to cast our response in a highly systematic form. It has seemed to the Council that we could be most helpful to your subcommittee if we confined ourselves to practical observations on those aspects of economic statistics that have grown directly out of our experience in meeting our statutory responsibilities.

You have inquired about the Council's thinking as to the adequacy of the Federal statistical program. Our judgment is that while the current program, taken as a whole, is commendable, there are numerous weaknesses that both can and should be remedied. In view of the heavy responsibilities assumed by the Federal Government under the Employment Act of 1946, it would be wise to devote more effort than is currently being expended on the improvement of our economic intelligence. A thoroughly adequate Federal statistical program should contemplate a system of interrelated figures about our economic past and present. This system should be flexible enough to take into account the innovations of a dynamic economy; yet it must also possess the stability and continuity necessary for meaningful measurements over time. Vigilance is ever necessary in maintaining an adequate Federal statistical program. The values of statistical series and procedures, like those of machines, are constantly being eroded by obsolescence and are in need of continuous renewal through innovation and

change. A memorandum dealing with particulars growing out of the Council's experience is attached.

You have also inquired about the steps taken by the Council within the past year to improve statistical programs and about the steps that we plan to take in the coming months. In brief, our activities have been as follows:

(1) We have urged the various statistical agencies of the Federal Government to accelerate the reporting of economic information. Notable progress has been made in the reporting of employment, hours, and earnings of nonagricultural workers; also in the reporting of retail sales, of exports and imports, and of changes in industrial production.

(2) We have worked with other agencies of the government on the improvement of basic statistics and their presentation, especially in the following fields: (a) employment and unemployment, (b) construction work, (c) financial status of business firms, (4) public works. Considerable progress has been made in the field last named.

(3) We have supported legislation providing for censuses of manufacturing, mining, agriculture, and distribution.

(4) We have sought to interest private agencies in the improvement or extension of their statistical programs.

(5) We have devoted considerable effort to planning revisions of the monthly compilation of Economic Indicators.

During coming months the Council will continue to work closely with other agencies seeking to improve economic statistics.

Sincerely yours,

ARTHUR F. BURNS.

MEMORANDUM ON STATISTICAL NEEDS

(To accompany letter by Council of Economic Advisers to Congressman Henry O. Talle, as of July 6, 1954)

This memorandum lists observations about statistical needs under the following categories:

(1) More prompt and frequent reporting
(2) Improvements in existing data
(3) Improvements in presentation
(4) Gaps in existing information

Under each of these categories—it will be noted that there is a considerable amount of overlapping among them—various improvements suggested by the Council's experience are indicated.

I. MORE PROMPT AND FREQUENT REPORTING

The Council has been handicapped in its work of analyzing and anticipating economic developments by the fact that some important statistics are not available until weeks or months after the periods to which they refer. It is desirable to speed the reporting of certain statistical series and to make others available at more frequent intervals.

1. Personal income

Data on personal income reflect variations in employment, wages, profits, dividends, etc. They are now reported to the Council about 30 days after the end of the month reported upon. This interval could be reduced by a week or 10 days, if wages and salaries of governmental employees, cash receipts from farm marketings, and social-security payments were reported more promptly.

2. Consumer incomes, expenditures, and intentions

The Federal Reserve Board's surveys of consumer incomes, expenditures, attitudes, and intentions are useful for understanding past changes in economic activity and for judging prospective changes. These surveys are now made annually and become available several months after the close of the interviewing in late February. A serious effort should be made to conduct surveys of this type every 3 months, and to make the data available shortly after the close of the interviewing.

3. Profits of manufacturing corporations

The quarterly financial reports by the Federal Trade Commission and the Securities and Exchange Commission are our best source on the profits and the

financial condition of manufacturing corporations. These reports become available to the Council about 90 to 120 days after the close of the quarter. The effort should be made to provide this information within 30 to 60 days of the close of the quarter.

4. Total employment and unemployment

These crucial data are reported monthly to the Council about 18 days after the close of the week to which they refer. Although the reporting is comparatively prompt, there still is reason to believe that the interval could be reduced by several days.

5. Nonagricultural employment and hours

These data, which are indispensable to an understanding of the employment situation in particular industries, are now available to the Council about the 5th of the month for the payroll period ending nearest the 15th of the previous month. There is, thus, not much scope for further reducing the lag in reporting. Nevertheless, the Bureau of Labor Statistics might explore the feasibility of reducing this interval by another week, possibly by arranging for direct reporting by a subsample of firms.

6. Exhaustions of unemployment insurance benefits

Data on the number of insured unemployed persons who have exhausted their benefit rights in a given month are not available until 3 or 4 weeks after the close of the month. An effort should be made to report these data for each month by the middle of the following month.

7. Labor turnover

Statistics on quits, layoffs, and new hirings are a valuable clue to the state of employment. They cover the entire calendar month and are made available to the Council about 27 days later. This is a shorter lag than was characteristic a year ago, but the feasibility of reducing the lag warrants further exploration.

8. Inventories and sales

The monthly series on manufacturers' inventories and sales, of wholesalers' inventories and sales, and of retailers' inventories are now received by the Council about 28 or 30 days after the end of the month to which the data refer. This lag of information on inventories has handicapped the Council.

9. Value of orders and shipments

Weekly data on new orders and shipments would be a very helpful source of information on current trends in economic activity. It would appear to be statistically feasible to select a sample of key companies in manufacturing which could report weekly the dollar value of the new orders they receive and the shipments they make, thereby significantly supplementing the monthly data now available.

10. Number of businesses

The numbers of new businesses formed and of old businesses discontinued are valuable gages of the vitality of a private enterprise economy. They are now reported every 6 months with a 6-month delay. It would be helpful if the former practice of reporting these data quarterly were reinstated, and if the interval between the end of the quarter reported upon and the date the data became available were shortened.

11. Rates charged on short-term loans to business

Interest rates charged by commercial banks on loans to their business customers show the price of bank credit for carrying inventory and conducting other business operations. These rates are now reported quarterly. It would be helpful, especially in intervals after general business activity has changed direction, to have such data reported more frequently.

12. International balance of payments

Data on the international balance of payments are indispensable for analyzing our economic transactions with other countries. They are now available on a preliminary basis about 9 weeks after the end of each quarter. It is to be hoped that the Department of Commerce and the agencies that cooperate with it in preparing these estimates will find a way of reducing this long interval.

II. Improvements in Existing Data

The uncertainties that surround economic statistics are not less troublesome than their tardiness or infrequency. The Council recognizes that the improvement of existing data is bound to be a fairly slow and costly process. In some instances, improvements will have to be based on new "benchmarks" provided by comprehensive censuses or by invigorated sources such as Statistics of Income. In other instances, considerable experimentation and research will have to precede revisions of current programs.

1. Employment and unemployment

The Council has felt keenly the need for more dependable information about total employment and unemployment in the United States. To meet the requirements of economic policy there is also a need for better statistics on local unemployment, especially for the larger cities. Statistics of employment in some major industries—for example, manufacturing and railroads—are satisfactory; but the figures for other industries—for example, agriculture and the service trades—are weak.

2. Partial unemployment and dual employment

The Council feels a need for monthly data on the number of persons holding less than full-time jobs for economic reasons, as well as on the number of persons holding more than one job concurrently. This information would provide valuable clues to the state of the employment market.

3. Labor turnover

There is a need for more dependable figures on hiring and layoff rates than are now at hand. Such information should be obtained from a larger and more representative sample of firms than at present.

4. Industrial production

Improved production statistics would be helpful in the study of growth trends and the impact of technology, as well as for other analytical purposes. New census "benchmarks" are needed for the production indexes of the Federal Reserve Board and the productivity indexes of the Bureau of Labor Statistics. More monthly series on production quantities would reduce the dependence of the monthly Federal Reserve indexes on man-hour data. Additional physical quantity data are also required to strengthen the annual Federal Reserve indexes for many areas.

5. New construction

Although the construction industry is of strategic importance in our economy, statistical information about the industry is very weak. For purposes of general economic analysis, three types of data are basic: first, on the volume of construction undertaken or started; second, on the volume of construction work executed; third, on the volume of building and engineering facilities completed and made ready for use. The figures for the first stage are best for housing, but even these need improvement, especially in nonpermit areas. The figures for the second stage are the most widely used; these are based to a considerable degree on guesswork and are weakest for private nonresidential and for State and local construction. Figures for the third stage are fragmentary at best.

6. Maintenance, repairs, and modernization

There is no reliable information about the volume of maintenance, repair, and modernization work. Data on this segment of construtcion, which seems to be of increasing importance, should be compiled on a regular basis.

7. Housing vacancies, conversions, and demolitions

At present there is virtually no information on these subjects. Systematic compilation of such data, once a year or more often, is essential to an understanding of the current condition and prospects of the housing market.

8. Manufacturers' inventories, sales, and orders

The sample of manufacturing firms used by the Department of Commerce in making the present monthly estimates of inventories, sales, new orders, and unfilled orders should be improved and expanded. There is a need for more dependable totals, for refinement of this type of information by industry, and—in the case of inventories—for cross-classification by stage of fabrication. It would also be helpful to have sales and orders broken down as between Government and business.

9. Retailers' inventories

The current data by the Department of Commerce are derived from inadequate samples, and take practically no account of the status of the small independent retailer. The methodological experiments in this field, now being conducted by the Census Bureau, deserve encouragement.

10. Consumer expenditure on services

This component of the current series by the Department of Commerce on consumer expenditures has a very insecure statistical foundation. It would be desirable to adapt the surveys of retail trade by the Bureau of the Census to cover the personal-service trades—hotels, laundries, barber shops, automobile repair shops, amusement centers, etc.

11. Consumer prices

It is important that price indexes closely reflect changes in the actual prices of goods and services moving through the markets of the economy. Prices of consumer durable goods entering into the Consumers' Price Index are official or quoted prices; they are not "actual" prices taking full account of variations in markdowns, discounts, trade-in allowances, or premiums and other forms of surcharges.

12. Entrepreneurial income

The Council has been handicapped by the lack of dependable information on the net income of unincorporated business enterprises, on the net income of farmers, and on net rentals. These important components of aggregate personal income are needed to detect changes in flow of incomes of different kinds.

13. National income and savings

The estimates by the Department of Commerce of the gross national products, national income, personal income, and personal savings are highly significant and constantly used. Their continued improvement depends on taking new censuses and on carrying through statistical programs such as are suggested in the present memorandum. It would also be desirable to develop information on a regular basis on the personal expenditures and savings of farmers, other independent proprietors, wage earners, and other groups.

III. Improvements in Presentation

The Council would be aided in its work of analyzing and interpreting economic developments if certain improvements were made in the presentation of economic data.

1. Spurious detail

Most economic magnitudes are estimates rather than exact counts, and are subject to varying degrees of error. In many cases data are reasonably accurate only to the nearest tenth of a million or tenth of a billion, and presentation of figures carried out to the last unit or the last thousand units may be misleading. As far as possible, spurious detail should be avoided by statistical agencies.

2. Explanations of data

The statistical agencies vary widely in the amount of attention devoted to explaining the sources and methods underlying their statistics. There is not at present a convenient, comprehensive, detailed, and easily understood explanation of existing major statistical series. Work toward such a manual is going on in the labor-force field. It is hoped that all agencies will press forward to the fuller explanation of their statistical data and their limitations.

3. Seasonal adjustments

In analyzing month-to-month changes in economic activity, difficulties of interpretation frequently arise because of doubt about the magnitude of seasonal factors. The need for seasonal adjustment is especially great in the areas of construction, employment, production, sales, inventories, and banking. Although a considerable number of important series are available in seasonally adjusted form, many are not. Furthermore, some of the seasonal adjustments now practiced seem obsolete or otherwise defective.

4. Economic Indicators

Economic Indicators, a 32-page publication prepared by the Council of Economic Advisers, is designed to provide a brief and conveniently arranged compendium of up-to-date economic statistics for the use of Congressmen and other persons who are not necessarily specialists in statistics or economics, as well as for the use of the Council. In view of the extensive opportunities for improving this compendium, the Council is now studying plans for revising the publication and will report its thinking to the joint committee at an early date.

5. Regional statistics

Although the Council is concerned with the American economy as a whole, current information about developments in particular regions is often necessary to understand economic trends and to appraise the effects of economic policies. For example, information regarding regional movements of the costs of home mortgage credit or business credit would indicate the speed and dispersion of changes in financial conditions across the Nation. It would be helpful if the statistical agencies would expand their publication of figures for different regions and localities.

IV. Gaps in Existing Information

As previously noted, the principal categories used in this memorandum unavoidably overlap to some degree. Some items listed in the present section might have been placed in section II and vice versa. The observations that follow should therefore be read in conjunction with what has already been noted in preceding sections, including the introductory comments to section II.

1. Unemployed persons not receiving insurance benefits

The Council has felt a need for current information on the number of unemployed persons not receiving benefits under the Federal-State unemployment insurance system. In addition to a current monthly series of this kind, it would be helpful to make occasional surveys of unemployed persons not receiving benefits, so as to discover (*a*) how many of them were not covered by unemployment insurance laws, (*b*) how many were covered but had exhausted their benefits, (*c*) the intervals over which the latter had gone without benefits.

2. Overtime hours

The council feels a need for continuous information about the number of overtime hours worked in industry and the amount of compensation therefor. The average length of the workweek is an early and useful indicator of prospective changes in employment and general business activity. Since overtime hours are the most sensitive component of the length of the workweek, it would be well to record them separately.

3. "Fringe" benefits

There is a need for regular information about the magnitude and composition of so-called fringe benefits realized by workers in the form of paid vacations, pensions, sickness benefits, life insurance, work clothing, lunches, etc. These have become important parts of the aggregate compensation of a job in many industries and appear to be growing in relative importance. Current statistics on average hourly earnings are no longer sufficiently representative of either the labor costs of employers or of the earnings of workers.

4. Low incomes by source

The council needs better information about low-income recipients. It would be helpful to have the annual surveys on income distribution give special attention to the low-income groups and to relate the low incomes to the activity of the family members—whether and how employed, or unemployed, sick, disabled, or retired—during the period when the income was received. Such information would expand knowledge about the causes of poverty and, it may be hoped, of ways of dealing with it.

5. Status of unincorporated businesses and trade and mining corporations

Current information on the profitability of businesses, as well as on their liquidity and indebtedness, is inadequate. The financial reports program of the Federal Trade Commission and the Securities and Exchange Commission yields quarterly information on balance sheet and income items for manufac-

turing corporations only. It is highly desirable to extend this program to cover the vast number of unincorporated businesses, besides corporations engaged in wholesale trade, retail trade, and mining.

6. Sales and inventories of consumer durable goods

In view of the magnitude and volatility of consumer outlays on durable goods, systematic information on this subject should be extended. It would be desirable to develop series on sales and inventory holdings of consumer durable goods at successive stages of the distributive process, to match the new index of production of consumer durable goods by the Federal Reserve Board.

7. Shipments of producer durable goods

Monthly or quarterly figures on the value of manufacturers' shipments of producer durable goods, distinguishing the flows to industry and to Government, would be very helpful both in their own right and in connection with the measurement of industrial production by the Federal Reserve Board and with the estimates of producer durable expenditures by the Department of Commerce.

8. Research activities

The expenditures by businesses, universities, other nonprofit institutions, and the Federal Government on research and development lie at the core of our economic progress. Given a generally accepted definition of "research and development," it would be highly desirable that those who are engaged in such activities report each year the following: (*a*) the number of their technical and professional personnel, (*b*) their expenditures on facilities and equipment, and (*c*) their expenditures on current operations. These data would help the Council appraise the magnitude of research activities, the areas in which it is forging ahead, and the areas in which it is lagging.

9. Rents under new leases

Present rent indices mainly reflect rentals paid under old contracts or arrangements, many of long standing, and do not provide a sensitive gauge of the current trend of rentals. Since the construction of homes and apartments for rent is an important part of an expanding housing industry, and since the volume of such activity depends heavily upon prospective rentals, there is need for a separate index of rents charged under new leases.

10. Interest rates on mortgages

In view of the vital importance of mortgage terms to the housing industry, it would be desirable to have a monthly or quarterly index of the current interest rate on mortgages, at least of the insured type, that would reflect variations in discounts, fees, etc., as well as contract interest.

11. Quality of credit

To appraise credit developments, especially in the expanding sectors of consumer and mortgage credit, it would be very helpful to have systematic information on the economic characteristics of borrowers taken in the mass—for example, their occupation, age, regularity of employment, income, burden of already outstanding debt on income, and liquid assets. The feasibility of gathering information of this type on a regular basis warrants careful exploration.

12. State and local finances

The gap in our knowledge of current trends in the operation of State and local governments is a special handicap because of the rapid growth of this sector of the economy. The Council would be benefited by quarterly information, reported fairly promptly, of (*a*) revenues, (*b*) expenditures, broken down as between capital and current accounts, and (*c*) outstanding debt, for State governments and local governments. Such information would facilitate a sharper analysis of the fiscal capacities of State and local governments to support public works programs. The feasibility of compiling data on anticipated capital expenditures should also be considered.

13. Federal obligations, by object

The Council would be aided by monthly or quarterly data on total Federal obligations incurred, classified by object, to supplement the presently available information about Federal expenditures. Analysis of the effect of Federal fiscal operations upon the economy requires information about the current volume of contractual obligations for different purposes as well as the amount of checks issued in payment for goods and services.

Mr. BURNS. In view of the fact that this document will be printed, I take it there will be no advantage in my reading it or, perhaps, even summarizing it. However, I will be glad to do either if you want me to.

Representative TALLE. I am certain the committee would like to have you do one or the other, and we leave it to your judgment which you choose to do.

Mr. BURNS. Let me make a few remarks concerning the document that I submitted on behalf of the Council.

In the first place, as I explained in my letter to you, Congressman, this memorandum by the Council does not attempt to deal exhaustively with the problems in the field of economic statistics. The document is rather addressed to specific problems and difficulties that have arisen in the course of the Council's work.

We have found, for example, that in certain areas and at certain times we have been handicapped because the statistics that we felt we needed were not available promptly.

In other instances we have been handicapped because the economic statistics we have worked with were, in one way or another, or so it seemed to our judgment, deficient.

In still other instances, there have been deficiencies on the side of presentation. Finally there are some prominent gaps in the statistical information now available and they have impeded our work to some degree at certain times.

The Council's document calls attention to these various difficulties that we have encountered. In some ways it is an incomplete document, Congressman, because it is practically silent on the very fine features of our present statistical program. But rather than devote space to praising that which exists, I thought it would be more useful to indicate those areas in which we might do better in the near future than we have in the recent or distant past.

Representative TALLE. Does that conclude your summary?

Mr. BURNS. That concludes my introductory statement, and I will be glad to answer any questions.

Representative TALLE. Senator Carlson, would you like to ask some questions?

Senator CARLSON. Dr. Burns, you made a statement that statistics which were needed were not always available. Would you amplify that?

Mr. BURNS. Yes. Part 4 of the memorandum lists various gaps that have seemed serious to me and my colleagues. One of them is the absence of figures showing the number of unemployed persons who have exhausted their benefit rights under our Federal-State unemployment insurance system. These data would be extremely useful especially this time.

Another example is the absence of information on unincorporated businesses. We know next to nothing about the profits or the financial condition of unincorporated business firms. Nor do we have good profit statistics on trade corporations or mining corporations.

We have no regular current statistics on the finances of our State and local governments. We have no statistics showing Federal contracts, that is, newly incurred Federal obligations, classified by the object of expenditure.

We have no systematic information compiled regularly on the quality of credit. Of course, that is a very important matter in judging economic developments.

We do not have at the present time any series showing the interest rate on home mortgages. We have a tolerably good index of rents taken as a whole, but we do not have an index showing rents under new leases. That, of course, would be a much more sensitive gauge of current changes in the housing market than the index that we do have.

We have no systematic information on research expenditures by private organizations.

Our statistics on shipment of durable goods are defective. We are not able to distinguish between the flow of goods of this kind to business or industrial firms on the one hand, and to government on the other.

We have good figures on the average length of the workweek, but we are unable to segregate the most sensitive component of that average; namely, the number of overtime hours worked.

We have good figures on average hourly earnings, but these figures are becoming increasingly obsolete. Because of the growth of a variety of so-called fringe benefits, the figures no longer reflect adequately either the cost to the employer or the remuneration of the employee.

We have much more information now than we used to have on income distribution, but we need a great deal more factual information than we possess about the low-income group. We need to be able to relate the low incomes received by members of our society to the activity in which they are engaged, whether they are employed or unemployed; if employed, how employed; whether the head of the household was sick or disabled or retired, and so forth, during the same period. For while we are a very prosperous nation, we still have poverty in our midst. We want to learn more about the causes of poverty, so that we may discover ways of dealing effectively with it. We need more factual information than we yet have to make much headway in that task.

These are the major gaps of information that have troubled us during the course of the past year or year and a half.

This list, which is discussed in section IV of the Council's memorandum is, I may repeat, by no means exhaustive, but it reflects the experience of one group of users of economic statistics.

Beyond this, let me say, there are serious qualitative deficiencies in some of the statistics that we do have. Statistics of the construction industry and statistics of employment and unemployment leave much to be desired. These and other problem areas are indicated in section II of the Council's memorandum.

Senator CARLSON. Dr. Burns, you have mentioned several of what I believe we would call deficiencies of statistics that are needed at this time. What is the responsibility of government in securing these statistics—or can we secure some of them from private agencies?

Mr. BURNS. I am sure the Government will have to play a very large part, probably a decisive part in the task of systematic collection of economic statistics. I am equally sure that trade associations,

universities, and others can do more in this area than they have done or are doing.

Senator CARLSON. How effective or how good is your cooperation from the private agencies and individual corporations in this field in getting this information that is so badly needed?

Mr. BURNS. Our own experience in the Council has been excellent. We have gotten information from private firms very promptly when we have requested it.

Senator CARLSON. Do you get information voluntarily?

Mr. BURNS. You mean information that comes to us——

Senator CARLSON. Without your request.

Mr. BURNS. Without our requesting it.

Well, of course, we get a good many letters, and some of these letters turn out to be very instructive. There are also reports on investigations that are done in universities or by trade associations or business firms, and we often have the benefit of these investigations. They are often sent to us pretty promptly by those responsible for the studies.

Senator CARLSON. I am convinced that this committee, or one member of it, is concerned about having statistics not only that are accurate but current. I never realized the value of it until the last year or so. It is important that if you have suggestions we have them available to us since this committee has a responsibility to recommend to the Congress anything in the way of legislation which is needed to make our Federal statistics readily available.

I gathered this morning from the testimony of the Bureau of the Budget that they were a coordinating agency more than an agency to gather statistics.

While we stressed the fact with the representatives of the Bureau this morning that we wanted to be helpful, they seemed to think that we were getting along very well; that there were some deficiencies but they weren't serious. I am so pleased to get your statement, because we do want to be helpful.

That is all.

Representative TALLE. Congressman Bolling.

Representative BOLLING. Dr. Burns, a very small matter before I lead into a series of questions. One of the things that has disturbed me—this came up during the hearings on the President's Economic Report last winter and also I notice in your letter and its enclosure where there is considerable mention in one context or another of employment or unemployment figures—is the category in the present series of persons classed as employed but who were not working. I think that I can cite that as an illustration. I wonder if there has been a reexamination by the Council or by some other agency in the executive branch of the categorization within these surveys. It seems to me that is rather unrealistic, to count a person employed when he has no income. Has there been a reexamination of that complicated problem?

Mr. BURNS. Yes. There has been a good deal. I am not familiar with all the efforts that have been made. I can indicate briefly the efforts with which I am familiar.

The Department of Commerce has appointed a committee of professional men under the chairmanship of, I believe, Dr. Stephan, of

Princeton, to look into this problem; that is the quality and character of the employment and unemployment statistics now gathered by the Census Bureau.

The Secretary of Labor has also appointed a committee, but I know less about that.

Representative BOLLING. Is that a committee to do essentially the same thing that the Commerce Committee is doing?

Mr. BURNS. As you know, the collection of unemployment and employment statistics is now spread over a number of agencies in our Government. I take it, as a matter of course, that the Secretary of Labor must have asked his committee to advise him on the particular activities in this broad field presently that are in the hands of the Department of Labor. But I am not sufficiently well informed to pursue this matter usefully.

Then, the Office of Statistical Standards, which has a general supervisory responsibiilty over the entire field of statistics in our Government, has been looking rather actively into the problem of employment statistics through a number of committees. The Council itself has cooperated in these efforts to some degree. Our labor expert has worked with some of these committees.

Congressman Bolling, you have referred to hearings before the joint committee last February. At that time various questions were raised about the adequacy of our present system of employment and unemployment statistics. As a result of those hearings, the Council has made two rather minor, but I think useful, changes in our presentation of statistics on this subject in Economic Indicators. For one thing, where we added figures on temporary layoffs. That is a group that one may fairly regard as being unemployed. We have also added figures on the number of men and women who are currently drawing unemployment benefits under our Federal-State insurance system.

In addition to that, we have plans under way of making Economic Indicators perhaps a little more useful in the future than it has been. Various suggestions have been developed by a staff committee for attaining the kind of objective that you seek to attain, Congressman.

What we will do eventually in this field, I am not prepared to say at the moment. But I think all of us realize that we haven't been doing quite as good a job as we ought to do both for ourselves and for the Nation as a whole.

Representative BOLLING. Dr. Burns, thank you for that answer.

One of the things that has disturbed me over a number of years—certainly ever since I have been on the parent committee of this subcommittee—as a person who had no training in statistics, was the fact that in a sense it was one of the mysteries to the layman. For example, I find it very difficult to communicate to my constituents exactly what savings are in the economic sense and what statistics on savings mean. This caused me to wonder some time ago—and I find myself still wondering—what agency of the executive branch has the final responsibility for taking leadership in this field.

You listed just a few minutes ago so large a number of gaps as to raise a very serious questions as to anybody in the Congress or in the executive having any basis, any reasonable basis on which to make sound decisions of an economic nature. I gather that you would agree

with that. You were nodding your head, but nodding heads do not show on records.

Would you agree with that, that these gaps are serious, as you appear to indicate?

Mr. BURNS. Yes. That is why I presented them, because I think they are serious.

Representative BOLLING. And they make it difficult for any of us in our different capacities to arrive at conclusions. Is that also correct?

Mr. BURNS. Yes. They certainly make our task more difficult than I would say it ought to be.

Representative BOLLING. Then the point of all that is this: In your judgment, what agency in the executive has the responsibility for taking leadership to see to it that the executive at least has statistics adequate to the responsibilities of the executive?

Mr. BURNS. Congressman Bolling, you are touching on a very difficult problem of Government at the present time. In our country, in our Federal Government, responsibility at the present time is rather widely diffused. The case is very different in some other countries. It is different in Canada, different in England. It was very different in Germany in the old days, and I believe is at the present time once again.

However, there is one agency in the Federal Government that has, theoretically a very large responsibility in this field, and that is the Office of Statistical Standards in the Bureau of the Budget.

As I understand the law, the Office of Statistical Standards can shift a statistical activity from one department to another. It can terminate a given activity. Of course, it has complete authority over all reporting forms and the like. It is widely expected to exercise leadership as far as standards of quality, standards of performance, are concerned.

Representative BOLLING. I think it may be well, Mr. Chairman, at this point to put in the record the law to which Dr. Burns refers. It is section 103 of Public Law 784 of the 81st Congress. It is very brief. If the chairman doesn't object, I will read it.

Representative TALLE. You may proceed.

Representative BOLLING (reading):

> The President, through the Director of the Bureau of the Budget, is authorized and directed to develop programs and issue regulations and orders for the improved gathering, compiling, analyzing, publishing and disseminating of statistical information for any purpose by the various agencies in the Executive branch of the Government. Such regulations and orders shall be adhered to by such agencies.

I take it the Office of Statistical Standards is, in effect, the agency established under that provision of law.

Mr. BURNS. That is correct

Representative BOLLING. You mentioned a rather substantial number of committees which are studying these problems, and I am sure study is essential. What I would be curious to know is what conclusions have been reached? The reason for the question, Dr. Burns, grows out of the testimony this morning, which, frankly, disturbed me a good deal. I got the very clear impression this morning from the representatives of the Bureau of the Budget that they were

saying, in effect, that, no, it wasn't really their responsibility to take the leadership in filling gaps, but they would be inclined to fill gaps or take leadership to fill gaps if, for example, your Council were to suggest that there were gaps that needed to be filled.

And your testimony would indicate—and I think quite properly—that you place the responsibility on the Bureau of the Budget. I think that one very useful purpose that we might serve in this subcommittee is to establish the fact that this responsibility does not seem to have been fully exercised at any time.

Who does have the responsibility for taking the lead?

Mr. BURNS. I am not sure whether you addressed a question to me, Congressman.

Representative BOLLING. The last was supposed to have a question mark after it.

Mr. BURNS. You and I have the same understanding of the law governing the responsibilities in the statistical field. Beyond that I have by now fairly detailed knowledge of the activities of my own office and a rather keen awareness of our own deficiencies. I don't think I would dare to testify about the deficiencies of other branches of the Government.

Representative BOLLING. I think we will not only all agree that this is wise, but also that it is commendable.

Representative TALLE. The Chair agrees.

Representative BOLLING. However, the problem remains, and the law, I think, is clear, as you have said. And I suspect that your advice in the matter to the principle would be quite well considered. I think it is very important that we recognize at the outset of these hearings that this subcommittee does not propose—and I don't propose to put words in anybody else's mouth, but certainly my concept of the subcommittee is not that the subcommittee will take over the functions of leadership that is and lies properly in an agency of the executive. I think it is very important for us to make it clear that our intention is to perform a congressional function, not an executive function, that we do not have any intention of taking over the leadership in filling gaps. We may make suggestions, but we are no the executive agency.

Representative TALLE. Will you yield to me at that point?

Representative BOLLING. I am finished, Mr. Chairman.

Representative TALLE. I wanted to remark that following our meeting this morning, two notable gentlemen said to me this was the first time that economists and statisticians had been welcomed to Capitol Hill. In any event, this committee is a committee that welcomes both economists and statisticians and will listen to their suggestions.

I would like to suggest, Dr. Burns, that the increase in rapidity of communication means very much. If I remember my history correctly, the Battle of New Orleans was fought several days after peace terms between the two contending parties had been signed. Some lives could have been saved if communication had been better at that time.

I would like to ask if what you really want is the difference between a photograph and a moving picture. Data as of a fixed day are a photograph. What you would like to have is not a picture of the body at infancy, at 1, and 2, and up to 21 years, but a running account that tells a progressive story; is that correct, Dr. Burns?

Mr. BURNS. As an ideal; yes; but, of course, as a practical matter, Congressman, responsible economists would be satisfied with photographs in some cases, and insist on a very rapid motion picture in other cases. The character of problems differs. In some areas you have rapid change and there you want statistics to be compiled at frequent intervals and reported very promptly. In other areas change proceeds much more slowly, so that photographs taken once a year or even once in 5 years may prove reasonably sufficient.

Representative TALLE. And therefore complete censuses at regular intervals interspersed with sampling would do pretty well, wouldn't they?

Mr. BURNS. As a broad principle; yes.

Representative TALLE. I should like to ask you about the gathering of statistics as against the interpretation of their meaning. It is my personal feeling that the people who gather them, if they are professional people, can probably interpret them better than people who have not gathered them. I may be wrong in that. I would like to have your reaction to that.

Mr. BURNS. Very broadly, I would be inclined to agree with you, Congressman, but I would, I think, want to make some distinctions. In the first place, I think it is highly important that those who will do the interpreting also do the planning of the gathering of statistics. It is not clear to me that they themselves need do in their own office the actual gathering.

For example, the Labor Department might originate and plan an unemployment survey, let us say. Labor experts would do the planning. They would also do the interpreting of the results or the tabulations once they were in. Yet they might enter into a contract with the Census Bureau whereby the latter would use its already existing field force to collect that information.

So the particular act of gathering, I think, can very often be usefully separated and some efficiency gained in the process.

I want to make one more remark and merely for the purpose of calling a problem to your attention. It is a very difficult problem, one that I have thought about some, but one that I don't really know the best answer to.

The opinion is held by some responsible people who have thought much about this subject that statistics will be most accurate, most dependable if they are entirely compiled, and even interpreted, by some agency other than the one which is directly and immediately concerned. The argument—and I am merely repeating an argument—runs as follows: You have an agency that is interested, let us say, in housing. That agency will have certain attitudes with respect to housing policy. If that agency compiles the statistics, there is a certain possibility or danger of bias. On the other hand, the danger of bias is reduced.

As I say, this view is held by some responsible people in the statistical field. It is a view that I understand. It is not a view that I find easy either to accept or reject. To be sure the view does rest on certain observations gathered in the course of experience. On the other hand there can be no escape from the fact that, the men who are thinking about substantive problems are probably the men who are best qualified to plan inquiries in the field and to interpret the results.

Representative TALLE. If I may point the matter up, there is currently, or will very soon be underway, a census of agriculture. There will be enumerators, crews, assistant supervisors and supervisors over them, and so on up the way. I did not mean to say that these enumerators are the best people for interpreting. I surely agree with you that those who do the thinking, organizing, and planning are the ones who should be capable of interpreting the statistics.

As to the accuracy of statistics, it could, I suppose, be possible by accident that one's conclusions could be better than the data on which the conclusions were based, but only by accident. Is not that true?

Mr. BURNS. I think that happens rather frequently, Congressman. At the moment I can think of one dissertation published in 1910 or 1912, a German book, which dealt with the housing market in Berlin. I remember studying that treatise, being fascinated with it, and then deciding that it was of some importance to check the accuracy of the underlying statistics.

I proceeded to make such a check and found that one out of every three figures was wrong. Yet in spite of those errors the author had drawn correct conclusions. That sort of thing happens.

On the other hand one can cite any number of instances where statistics are perfectly accurate, at least in the sense that they have been copied accurately from some official source, and where demonstrably incorrect conclusions have been drawn.

All of this simply means that good judgment will save many of us from grievous error at times, but at times only.

Representative TALLE. I think that is a very sage remark.

You will agree, I know, that quality is important and you have emphasized that in your statement, too.

Senator Carlson?

Senator CARLSON. I was just thinking, Doctor Burns, the work of gathering these statistics is not just to obtain information about the past, but is to get information that will be helpful at present and the foreseeable future.

What is the situation in regard to the gathering of these statistics and your ability to interpret them as regards the future? How effective can that be? Let me give you an example.

The parity income of agriculture is down to 88 points. What effect is that going to have in 6 months or 12 months on the purchasing power of agriculture in this Nation? Do the statistics that you use give some insight into that, or how can we get figures or statistics that will show us what the future holds?

Mr. BURNS. The main reason for assembling and analyzing statistics, at least on the part of an agency like the Council—and I think that is true for virtually every one who is concerned with practical problems—is to form judgments about the economic outlook, the course of economic events in the months and years ahead.

We use statistics, along with other types of information, for this purpose. We have, of course, no direct observations on the future. We cannot have them. All that we can do is gather information that foreshadows future business. For example, if you give me statistics on construction contracts that are being written currently, that may enable me to form some judgment about the construction outlook, that is, the construction outlays that will be made 3, 5, 6 months in the future. Again, if you give me statistics on the number of new firms

that are being formed, that will give me some basis for a judgment about the vitality of business life and also about the investment outlays that may be generated by the formation of new firms in our society.

Again, give me statistics on new orders and I am apt, in my own mind or through some statistical device, to translate the orders of today into the shipments of 3 months or 6 months from now.

Again, if you make inquiries among businessmen as to their investment programs or among consumers as to their buying intentions, you will obtain information that can help you in judging the business that will be at hand, in a few months or a year or so from now.

That is one kind of information that economic analysts try to gather and try to improve. We have made very notable progress in this direction in the course of the last generation and the greatest progress has been in very recent years. Of course, this kind of information must be supplemented by many other types of information. Economic research has indicated that there is an element of repetition in business cycle experience. No 2 periods of prosperity and no 2 periods of recession have been alike. Each, strictly speaking, is an individual.

But there are repetitive elements in these experiences that research has brought to light. For example, we find that business failures will tend to fall off some months before a recovery takes place. The period of the lead will vary. But this early downturn of business failures with respect to an upturn in general business activity has occurred rather uniformly in the past and that gives us a basis for judging the economic future.

Again, we have found in experience that the length of the workweek in industry will be adjusted before the number of employees on the payroll is allowed to vary, both at upturns and downturns. In other words, when orders, sales, begin to fall off, what a typical manufacturing firm will do for a time is to reduce overtime, spread out the work, even hold on to some employees who are not clearly necessary. There are very definite and sizable costs in building up a working force, so that no firm will reduce the size of its working force unless it expects that the downturn in orders and sales is going to last for some time. But if the downturn continues, the prior adjustment of the length of the workweek will surely be followed by an adjustment in the number of men employed.

Knowledge of this and other sequences or relationships, established by historical records, gives us a clue to the interpretation of current events. There is a great deal of knowledge of this type that economic research has put at the disposal of the economist. That information or that knowledge does not give him the power of prophecy. But it does enable him to bring a certain training and judgment to bear on current events and this is, at the least, an improvement on uninstructed guesswork.

Senator CARLSON. I take it from your statement which you just made that the workweek which increased from 39.3 hours to 39.6 hours between May and June and the average hourly earnings in manufacturing for June, which were $1.81, an all-time high, and the average weekly earnings in all manufacturing of $71.68, which were exceeded only in October 1953, are favorable indicators for continued

increase in production and a continued rise in the economic trend in this area.

Mr. BURNS. Yes.

The increase in the length of the workweek that has occurred recently is, I think, a very encouraging fact. The low point on a seasonally adjusted basis was reached in January. It was then 39.2 hours on a seasonally adjusted basis, and now is about 39.7. There has been an irregular rise since January of this year in the length of the workweek in manufacturing. I think it is an entirely fair interpretation of that fact to expect an upturn in the number employed. Of course, that doesn't mean that this will necessarily happen, but the increase in hours is surely a favorable sign as far it goes.

Senator CARLSON. Dr. Burns, do you have information or statistics on the savings of people? I am sure that enters into this picture, too. We talk about consumer spending and the ability of getting goods into channels of trade. It seems to me that sometimes psychologically the people determine to save their money instead of spending it. Do you have anything on that?

Mr. BURNS. Yes. The statistics on savings are compiled by two agencies of the Federal Government—first, by the Department of Commerce, and second, by the Securities and Exchange Commission. Both of these are quarterly compilations.

Senator CARLSON. If I read these figures correctly, for the first quarter the figure for net savings as percent of disposable income was 8 percent, and in the second quarter it was 7.1 percent, which would indicate that the people of this country were at least spending more of their savings than they were in the first quarter and would indicate that they were not hesitant to buy.

Mr. BURNS. According to these figures, the rate of spending did pick up in the second quarter, and I would not be surprised if the figure on consumer expenditure were raised a little after it is revised.

We have a June report on retail sales which is very encouraging. Of course, in interpreting the retail sales figures for the month of June, you have to bear in mind that, whereas weather factors helped to keep retail sales down in the month of May, they added an extra advantage to the month of June. If you make allowance for seasonal and weather factors, the picture is not as good as it appears at first glance, but it is still quite good.

Representative TALLE. Congressman Bolling, have you any further questions?

Representative BOLLING. Yes, Mr. Chairman.

One that can be cleared up quickly, I think, is this. It has been the custom of past Councils to issue a Midyear Economic Report, and I wondered if that was contemplated by this Council if so, when will it be available, and if not, why not?

Mr. BURNS. The Council, the present Council, did not issue a midyear report last year. The present Council does not plan to issue such a report this year unless it is instructed to do so.

As you may recall, Congressman Bolling, the law calls for a report in January by the President, and the law also states that supplementary reports dealing with questions of policy may be issued by the President at any time. The law says nothing at all about a midyear report.

Representative BOLLING. I take it to be implicit in that statement

that the decision is that it is not felt necessary to give the Congress or the country the benefit of a full-dress review of the economic situation in the form of a midyear report.

Mr. BURNS. As you know, several agencies of the Government make appraisals of the economic situation. The Federal Reserve Board does that regularly, the Department of Commerce does that regularly, and other departments do that to a certain extent as well. I don't think the country is lacking in appraisal of the economic situation by responsible agencies of the Government.

Representative BOLLING. Of course, Dr. Burns, you know as well as I that there is only 1 Employment Act; and only 1 Council of Economic Advisers and only 1 Joint Committee on the Economic Report, both of which have very specific responsibilities.

I will drop that line of questioning.

Mr. BURNS. May I say a word?

Representative BOLLING. Certainly.

Mr. BURNS. I think the present Council is discharging its responsibilities, Congressman Bolling.

Representative BOLLING. There is some suggestion in some of your answers to some of these questions put to you by Senator Carlson which may be in part an answer to this next series of questions.

Quite a long time ago, I read an article in the Saturday Evening Post called Ike's Depression Doctor and I will read a few sentences from it. It is on page 157 of the issue of April 17, 1954.

In the discussion of the activities of what the title calls Ike's Depression Doctor and the economic situation, it says:

> Six months before, when employment was still rising, and the cycle of business activity had yet to reach the peak, Arthur Burns took a look at some private charts he had been keeping experimentally for several years and got a premonition. To make a long explanation short, there are 2 business cycles, not 1. The first is the one business analysts commonly refer to, based on reports of current retail sales, employment, volume of bank loans, number of new businesses formed, and several others published by Government and private agencies. When these indicators are rising, the business cycle is said to be on the upgrade, and when they are falling, on the decline.
>
> But in his office at the National Bureau of Economic Research, Burns' studies of business changes over the year had revealed a second cycle, one discernible only from statistics not as yet generally published. Most of them were not even compiled until research recently hinted they might be useful because of a time relation the second cycle seemed to bear to the first. The second cycle, it was plain, not only from the big drop of 1929, but from lesser drops in 1921 and 1937, had a habit of anticipating the first, diving before the first reached its peak, and rebounding before the first hit bottom.

When I first read that, I was intrigued and somewhat flabbergasted at the same time. But do I gather correctly from what you said in reply to Senator Carlson's questions that these charts were really not mysterious or private, but evaluations of various statistical series known to all.

Mr. BURNS. I do not deal in mysteries, Congressman Bolling.

Representative BOLLING. Then I take it that the impression that I got from the article was——

Mr. BURNS. You were not quoting my language in that article, Congressman.

Representative BOLLING. No, I was not. I do not think that I said that I was.

Mr. BURNS. No. I know that. But I am at this particular point just as sensitive about the record as you were at an earlier point. I want the record to show that that language was not mine.

Representative BOLLING. Oh, certainly.

Mr. BURNS. Well, a simple answer to your question, Congressman, is, of course, that I do not deal in mysteries. I would be afraid of myself, and I should think you would be of me, if I did.

Representative BOLLING. What is the status of this article? I think it is important to clear it up. Is it authorized or unauthorized, or what?

Mr. BURNS. Which article?

Representative BOLLING. The article in the Saturday Evening Post of April 17. Is this an article that was approved by you, or is it just a reporter's scrambling of—well, I am not sure what?

Mr. BURNS. I surely did not authorize the article. Nor did I welcome it, but I could not prevent its appearance. I do want to say that the author was very courteous in showing me his manuscript. I then quarreled with much of it and I would still quarrel with parts of it. When it comes to my economic ideas, I very much prefer to be the one who expresses them. I shall be glad to send you reprints of my articles on which the particular passage from the Saturday Evening Post that you cited is largely based.[1]

Representative BOLLING. There is one more matter. I had the impression that the Department of Commerce survey of business investment plans indicated a very mild drop in the third quarter, and I gather that you have available, or you were quoted as saying that you had available, a later survey or survey of another—I do not know what to say—another survey—which indicated the opposite. Could that be clarified?

Mr. BURNS. Yes. At a press conference that I held on June 8 of this year, I referred to my own expectations concerning expenditures by businessmen on plant and equipment. I indicated that I was fairly optimistic about that, and my reasons for optimism were, first, that the McGraw-Hill Co., upon resurveying manufacturing firms in April of this year, found that expected expenditures for the calendar year 1954 had been revised upward from the plans as they appeared in the November 1953 survey made by that company. I went on to say that another and very limited survey, made at a somewhat later date than the second McGraw-Hill survey, indicated much the same thing, and to a somewhat greater degree. In view of these indications of upward revisions in expenditure plans, I stated that I had rather sanguine expectations about this category of expenditure for the rest of this year.

Representative BOLLING. Now, one final question. I gather from the total of your testimony and from what I have heard you say before that you would always want to emphasize that, as important and essential as all this statistical information may be, if we were to arrive at the millennium when we had all the statistical data that any of us might desire, we would not even then be in a position, on the basis of our current knowledge, of being able to predict with sureness?

[1] The reprints referred to, New Facts on Business Cycles, Thirtieth Annual Report of the National Bureau of Economic Research, Inc. (pp. 3–37), and Business Cycle Research and the Needs of Our Times, Thirty-third Annual Report of the National Bureau of Economic Research, Inc. (pp. 12–13), are available in the files of the Subcommittee on Economic Statistics.

Mr. BURNS. I find it very easy to subscribe to that, Congressman.

Representative BOLLING. Thank you, Doctor.

Representative TALLE. The answer to that is the human equation, is it not?

Mr. BURNS. I beg your pardon?

Representative TALLE. The reason for that is the human equation?

Mr. BURNS. Yes, fundamentally.

Representative TALLE. I think it only fair to our staff director that he should have an opportunity to get in a word before we adjourn.

Mr. ENSLEY. I do not have any questions except, Dr. Burns, I know some day soon a member of my committee will ask me to explain this diffusion index that your Bureau of Economic Research has developed. Would you be good enough to explain it to the members of the committee?

Mr. BURNS. I am very glad you have asked me that question, because it will help me to clarify this very mysterious quotation that Congressman Bolling referred to.

A diffusion index is simply a percentage figure which indicates what proportion of the individual activities within a given area are expanding or declining.

Now, let me illustrate. Suppose, let us say, that you have 100 industries and you have a combined output figure and a total output curve for all of these industries. A diffusion index would complement that overall index of total production by showing, month by month or quarter by quarter, what proportion of these 100 industries are undergoing expansion and what proportion are undergoing contraction.

Now, that is all that a diffusion index is. It shows, in other words, the degree to which expansion has spread or has become diffused in the sphere of production or in the sphere of employment or in the sphere of profits, whatever the area of economic activity that is being considered may be.

Now, extensive investigation by the Bureau of Economic Research has shown that diffusion indexes can yield a useful early indication of a change in direction of economic activity. We have done a great deal of research in that field, and that research is still in progress. While diffusion indexes are already being used, I would want to say now, as I have on all other occasions, both public and private, that the practical utility of these indexes remains to be tested.

Mr. ENSLEY. Thank you very much for that explanation, Dr. Burns. Mr. Chairman, the Joint Economic Committee in its report of February 26, 1954, directed the committee staff to sponsor an intensive review of Economic Indicators. As part of this review, which is being undertaken with the cooperation of the Council of Economic Advisers and the Bureau of the Budget, we believed that it would be helpful to receive comments from the users of Economic Indicators. On the cover of the May and June issues we invited comments of the subscribers and of the Government users, both in the executive and legislative branch. We asked that these comments be submitted by June 30.

Mr. Chairman, we have received nearly 50 letters with suggestions and comments. They are good letters and excellent suggestions are

made. I would ask the subcommittee for permission to insert these letters at this point in the record.

Representative TALLE. These letters and materials certainly appear to be highly pertinent and they will therefore, without objection, be included in the record, and it is so ordered.

(The letters referred to above are as follows:)

LACLEDE GAS CO.,
St. Louis 1, Mo., July 7, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington 25, D. C.

GENTLEMEN: I have been reading Economic Indicators for some time now and believe it to be an excellent presentation of basic data.

The booklet in its present form is sufficiently brief to enable it to be read in a short time. At the same time, the tables accompanying the graphs supply detail for those who desire additional information. I think that the committee is to be congratulated on the job being done in this publication.

Sincerely,

D. E. PAUL, *Statistician.*

[Telegram]

NEW YORK, N. Y., *June 30, 1954.*

Dr. GROVER W. ENSLEY,
Staff Director, Joint Committee on the Economic Report, Senate Post Office, Washington, D. C.:

My comment on Economic Indicators is distinctly favorable. Breadth of economic scope seems about right. In presentation, however, some readers (especially laymen) might like to see a little less emphasis on area charts and a little more on year-over-year curves. Congratulations on the good work which committee and staff are doing.

BERRIDGE,
METROPOLITAN LIFE INSURANCE CO.

CHAMBER OF COMMERCE OF THE UNITED STATES,
Washington, D. C., June 29, 1954.

Mr. GROVER W. ENSLEY,
Staff Director, Joint Committee on the Economic Report,
Congress of the United States, Washington, D. C.

DEAR MR. ENSLEY: I am transmitting to you herewith suggestions by the business statistics committee for improving Economic Indicators. Let me say at first, however, that there is widespread agreement on the high degree of usefulness and practicality of your publication and we hope it will be continued. If you had asked us to tell you what is right about the publication, our list would be far longer than this one. In addition to the suggestions that follow in this letter, I am attaching specific lists of suggestions from certain individual commitee members. The page numbers refer to the May 1954 issue of Economic Indicators.

Some of the charts are quite crowded, especially on page 13. The suggestion is that 1 year of the comparison be dropped or some consideration might be given to the use of a 3-year median of past data for comparison with the current year.

In the charts on page 31, it would be more convenient for the reader if the explanation of the dark-shaded bars was on the first chart of Total Budget Expenditures.

While at present two series on construction are shown, pages 17 and 18, only the second one, Housing Starts can be considered as an indicator of what is to take place in the construction industry, and then only in the residential category. The series on New Construction indicates the amount of money going into our economy as a result of current construction activity, but it does not indicate the future construction activity trend.

In view of the importance of the construction industry in our economy it seems appropriate to suggest that the F. W. Dodge Corp.'s statistical series on construction contracts awarded in the 37 Eastern States be seriously considered for inclusion in any revision of the bulletin. This data could be shown for the three major construction categories, i. e.; nonresidential building, residential building, and public works and utilities, as well as for total construction. This

series on contract awards would most certainly anticipate changes in the New Construction series as estimated by the Department of Commerce and the Department of Labor. Naturally, if F. W. Dodge data were used the F. W. Dodge Corp. would expect to be shown as the source.

Cordially,

R. BUFORD BRANDIS.

E. I. DUPONT DE NEMOURS & CO., INC.,
Wilmington, Del., June 23, 1954.

MR. R. BUFORD BRANDIS,
Secretary, Committee on Business Statistics,
Chamber of Commerce of the United States,
Washington, D. C.

DEAR BUFORD: In answer to your recent request for comments on the monthly publication, Economic Indicators, the following changes seem desirable:

Year to date figures might be shown for the production and similar series now appearing on pages 12 to 14, 17, 18, 20, and 26. While it is always desirable to compare the current month with the previous month and with the same month last year, in many series where monthly fluctuations are wide it would also be quite helpful to have year to date figures to minimize the importance of minor monthly changes.

For series not appropriate for cumulative figures, and where space permits, it would be helpful to show monthly figures for the current year and for the previous year side by side for more ready comparison.

Now that the war years are some 10 years behind us, perhaps they should be omitted from detailed tables and only the year 1939 kept as a prewar base. Annual tables then might show 1946 and all subsequent years.

The stock price data on page 6 do not seem to me to be of sufficient importance to be included. I would suggest that they be omitted. If it is desirable to include a series on stock prices, perhaps the Standard and Poor's Index should be substituted for the one shown here.

In the personal income section, page 23 or 24, there might be included applicable estimates of personal tax and nontax payments, possibly monthly in the data on page 23, but certainly quarterly in the data on page 24.

Other additions which would be helpful are freight car loadings (weekly), business failures—number and liabilities, and the Dodge series on construction contracts awarded.

In general, one feature of the usefulness of this publication is its speed rather than its completeness. If there are some series whose inclusion delays publication of this record each month, perhaps they could be omitted in the interest of early availability of the remaining series.

Very truly yours,

IRA T. ELLIS, *Acting Economist.*

WESTINGHOUSE ELECTRIC CORP.,
Pittsburgh, Pa., June 15, 1954.

MR. R. BUFORD BRANDIS,
Secretary, Committee on Business Statistics,
Chamber of Commerce of United States, Washington, D. C.

DEAR MR. BRANDIS: I am an enthusiastic user of Economic Indicators. It is timely and clear. Adoption of the following suggestions would make it even more valuable.

1. Bring pages 15 and 19 adjacent to each other, and reconcile the change in inventory figures.

2. On pages 24, show the derivation of disposal income by charting personal income and taxes.

3. On page 10, show straight-time hourly wages to bring out changes in base rates. Let average weekly earning figures reflect the degree of overtime.

4. Put all charts in proper perspective. Page 12 is an example of overmagnification of movement. I worry about its effect on the more volatile members of the business community. If the full page were used for the chart scale, and the table were inserted in an unused area of the chart, it might be possible to correct the visual impression.

Sincerely yours,

D. C. HOOPER,
Manager, Market Planning Department.

THE NATIONAL CITY BANK OF NEW YORK,
New York, N. Y., June 17, 1954.

Mr. R. BUFORD BRANDIS,
United States Chamber of Commerce,
Washington, D. C.

DEAR BUFORD: I find Economic Indicators the most useful and convenient compendium of economic statistics available among the Government publications and, as such, would like to see it continued. Any suggestions for revision are relatively minor. There have been occasions when it would have been helpful to have the "changes in business inventory" on page 15 show a separate "nonfarm" inventory change as well as the total. This would enable us to make a better comparison between this quarterly series and the monthly Department of Commerce series.

Similarly on page 19 some additional detail would be helpful on inventories and sales, because these have proved such key factors in recent business adjustments. Specifically, a breakdown between durable and nondurable goods might well be shown, or perhaps inventory by stage of manufacture.

On page 8 a total employment figure, summing up the several columns, would be convenient.

If it is difficult to accommodate these suggestions because of space limitations, I might also add that page 1 is something I rarely refer to, primarily because the magnitudes are so large compared to the scales that it is rather hard to see much change from quarter to quarter. Perhaps this page might be deleted, since the data is elsewhere in the publication. Also, I have seldom found use for the per capita disposable income figures on page 25, and the constant dollar estimate of disposable income at 1953 prices might be shifted to page 24, thus saving a page.

These are all minor suggestions as to form and content. I am not in a position to comment on the validity of the figures themselves.

Very truly yours,

STAHRL EDMUNDS,
Economics Department.

SUGGESTIONS PRESENTED TO THE COMMITTEE ON BUSINESS STATISTICS, CHAMBER OF COMMERCE OF THE UNITED STATES, BY K. E. MILLER FOR IMPROVING ECONOMIC INDICATORS

Basically the pamphlet is an excellent job and only a few suggestions are offered for improvement. It is important as an early source of several series of basic economic data. It might even be the best place for original release of many Government series. Frequently data are late in becoming available in useful form from the originating agency and thus receive poor handling by the press. Nothing should be done to slow up the release date of the monthly Indicators even though a number of technical improvements probably could be made if more time were taken for drawing and printing.

In terms of chart construction, the use of ratio scales is suggested for some of the pages where that would improve comparisons. Such charts may be drawn with only minimum amount of horizontal grid. Also they eliminate the problem of distortion which arises where scales are broken as is done on page 8 of the May issue. Also, inconsistencies on matters of scale breaks should be corrected. Several of the charts such as on pages 4 and 5 do not go down to zero but show no scale break.

Certain charts could be resized to fit the data much better than the ones presently used. For instance, pages 18 and 25.

Much space is given to employment, hours, etc. The charts on page 9 waste space and do not make easy comparison possible. By using broken vertical scales, all 4 of the curves could be stacked in 1 panel leaving space for other items. For instance, the index of total factory payrolls is an important omission.

A chart on new orders compared with inventories or sales or with the inventories-sales ratio is suggested in the section on inventories and sales, page 19. The data presented on page 32 is particularly useful, but perhaps could be presented in other forms from time to time.

It is suggested that the cash farm income from crops and livestock be included in the table on cash farm income shown on page 26. Sufficient space is

available for including these two columns. Including these two series in chart form would improve the chart on that page and show the important differences occurring in the source of farm income from time to time.

In most of the statistical series presented in the publication, seasonally adjusted data are used. However, in the section on nonagricultural employment and other wage series unadjusted data are used. Consideration could be given to presenting the Federal Reserve Board adjusted series in keeping with the data generally carried.

In general, the data and charts carried throughout the pamphlet are presented in an informative yet simple manner. As a general suggestion, it might be well to have the various data series plotted on 2 or 3 different basic types of charts so they could be alternated from time to time to highlight the important strong and weak points of the economy.

CORN INDUSTRIES RESEARCH FOUNDATION, INC.,
Washington 6, D. C., June 22, 1954.

Mr. R. BUFORD BRANDIS,
Secretary, Committee on Business Statistics,
Chamber of Commerce of the United States,
Washington, D. C.

DEAR BUFORD: My comments on Economic Indicators, a publication prepared for the Joint Committee on the Economic Repart by the Council of Economic Advisors, which you requested by June 30 are given below and are primarily of an editorial type rather than of a basic nature.

The material shown graphically in Economic Indicators is well selected, covering so far as I am concerned the most important elements in our economic sphere. While each of us would probably include a few different or additional time series, and we might classify them in a slightly different way, I think the list is not only comprehensive but also representative. The publication has proved this by its wide acceptance.

The editorial comments I would like to make are:

Page III: Generally speaking, the analysis of an economy is based upon three major considerations. They are usually in the order of (1) supply, (2) demand, and (3) price. If this order were chosen, the list of the charts would be materially different.

Under the heading of "Prices" on this page, no actual prices are shown in the charts or tables, only price indexes. The heading might be changed to "Price indexes." I personally recommend the omission of "stock prices."

Page 1: Place "billions of dollars" immediately above the figure "300" on the ordinate scale. Put "Consumers," "Business," and "Government—Federal, State, and Local" in the center of the charts.

Page 3: One of the important rules in chart making is to show the zero line or a heavy 100 line as a line of reference. In the chart on this page there should be a break of the ordinate scale, or a heavily ruled 100 line.

In footnote 1, it would be helpful to know whether or not the index structure has been slightly or materially changed.

Page 4: The ordinate scale should be broken, or the horizontal 100 line should be heavy.

Page 5: The chart on this page consists of two parts. The ordinate scale is shown to be in the form of an index with 1910–14=100. This scale designation of the top chart does not apply to the second chart which shows the "parity ratio." The ordinate scale on the second chart should be "percent." Here again, the ordinate scale should be broken or the 100-percent line put in heavy.

Page 6: At the top of the first chart on this page, if the heading reads "Weekly average," then the heading on the right portion should read "Weekly" instead of "Weekly index."

Page 7: I would suggest that the ordinate scale designation read "Millions of persons 14 years of age and over." I do not think it good treatment to break this heading into two parts.

Footnote 4 should indicate whether the data prior to 1953 differ much from the subsequent data. I believe the reader has a right to this information.

Pages 10 and 11: Please note how the ordinate scale is broken here and still zero is shown in each case.

Page 12: Ordinate scale should be broken, or 100 line shown heavily.

Page 13: Why should "Percent of theoretical capacity" be shown for steel and not for the other time series—electric power, bituminous coal, and cars and trucks?

Page 14: Ordinate scale should be broken, or the 100-percent line shown heavily.

Page 17: What happened to "Monthly average" for the years 1951, 1952, and 1953? Was the revision "beginning with January 1951" slight or material?

Page 20: Could we not add to this chart the dollar duties paid on total imports? At the top of the chart the "Monthly averages" should read "Monthly averages for year" and the chart showing data for 1952–54 should be headed by "Monthly averages."

Page 26: At the top of this chart could be placed the headings "Monthly averages for year" and "Monthly averages."

Page 30: Is "Demand deposit adjusted" adjusted for seasonal variation? The line appears entirely too regular not to be adjusted for seasonal.

Page 31: What is the statutory debt limit? Why not show this as the debt figure? What are "Total budget expenditures"? Are they different from total expenditures? How about "Net budget receipts" and "Net receipts"?

Yours very truly,

FLOYD J. HOSKING,
Executive Vice President.

EQUITABLE LIFE INSURANCE CO. OF IOWA,
Des Moines, June 28, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington 25, D. C.

GENTLEMEN: We would like to be on record to the effect that we consider the publication Economic Indicators to be a very helpful and worthwhile project.

We find this very useful in our work, and hope that its publication will be continued.

Very truly yours,

R. H. RICHARDS, *Superintendent of Bonds.*

BERKELEY, CALIF., *June 26, 1954.*

To the JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington 25, D. C.:

COMMENTS ON BASIS OF TREND IN GROSS NATIONAL PRODUCT (GNP), AS SHOWN REGULARLY ON PAGE 2 OF ECONOMIC INDICATORS

I make this comment in response to "box" entitled "Comments Invited" on front cover of Economic Indicators, June 1954.

GNP is useful as an approximate quantitative measure of overall business activity throughout the Nation. Accordingly, the trend in GNP is significant information.

I refer to the charts and table on page 2 of Economic Indicators, June 1954, for the periods indicated. During this period, the dollars have widely decreasing purchasing power in terms of consumer or wholesale prices.

Criticism: The trends over the period, as indicated in the charts and table, are therefore greatly exaggerated and misleading.

Suggestions: Additional charts and table should be shown, wherein GNP is based on dollars of constant purchasing power, say average for 1947–49 based on either consumers or wholesale prices.

Also, total GNP for each year would be more significant if it were shown on a per capita basis average for that year, in addition to the basis indicated above.

ARTHUR C. ALVAREZ.

ESSEX FELLS, N. J., *June 24, 1954.*

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington 25, D. C.

GENTLEMEN: As a user of the report Economic Indicators I should like to add my comments as to what changes, if any, should be made.

I like to think of the report as a thermometer to the Nation's business health, and find most of the information of value. I would like to see included another group of business indicators directed more toward trade conditions. The data on business in corporations, and business failures and liabilities are most helpful, and are available from other sources, such as Dun & Bradstreet. I believe however, they would add value to judging trends from these Economic Indicators purely from the personal point of view.

The one table which I find least valuable is the "Average hourly earnings—Selected industries." The Economic Indicators includes the "average weekly hours" and the "average weekly earnings." As a measure of employment conditions and pay these latter two are sufficient, because to me it is the take-home pay at the end of the week and not how much a person earns per hour that is important. In other words, our average hourly earnings are important for their purpose, but I question their value as an economic indicator.

The Economic Indicators are very valuable in my business analysis for the pharmaceutical industry, and I trust they will be continued.

Sincerely yours,

H. HAYWARD THRESHER.

GUARANTY TRUST CO. OF NEW YORK,
New York 15, N. Y., June 23, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington 25, D. C.

GENTLEMEN: In reply to your request for suggestions relating to material contained in Economic Indicators, I have prepared a few comments concerning the series which lists yields of United States Government bonds.

In my opinion, the use of this series is limited and subject to qualification inasmuch as the terms of the money rates included in the tabulation do not remain constant. The maturities of the bonds which comprise the series are being shortened continually through the passage of time, while deletions or additions might add further to the inconsistency of the time element.

For example, the new series, which shows the yield of the 3¼-percent bonds of 1983–78, currently represents the rate to call date for a 24-year Treasury issue. Four years hence it will represent the rate for 20-year money and, after 9 years, the rate for 15-year money. The figures thus made available preclude an accurate comparison of money rates of the same term over an extended period of time.

A series of rates with fixed terms would eliminate this objection. Yields then would reflect interest-rate movements only, and in no way would they be influenced by maturity changes. Such a series is made available by the Bank of Canada in its monthly Statistical Summary which contains the theoretical rate for internal Canadian Government securities of 2, 5, 9, and 15 years. Also, some of the private commercial banks and corporations in this country maintain a similar series for United States Treasury issues.

I believe it unnecessary at this time to discuss the mechanics used to obtain the theoretical yield for various years. There may be differences of opinion with respect to some of the finer points, although the rates generally are derived from a so-called yield curve such as that presented each month in the Treasury Bulletin.

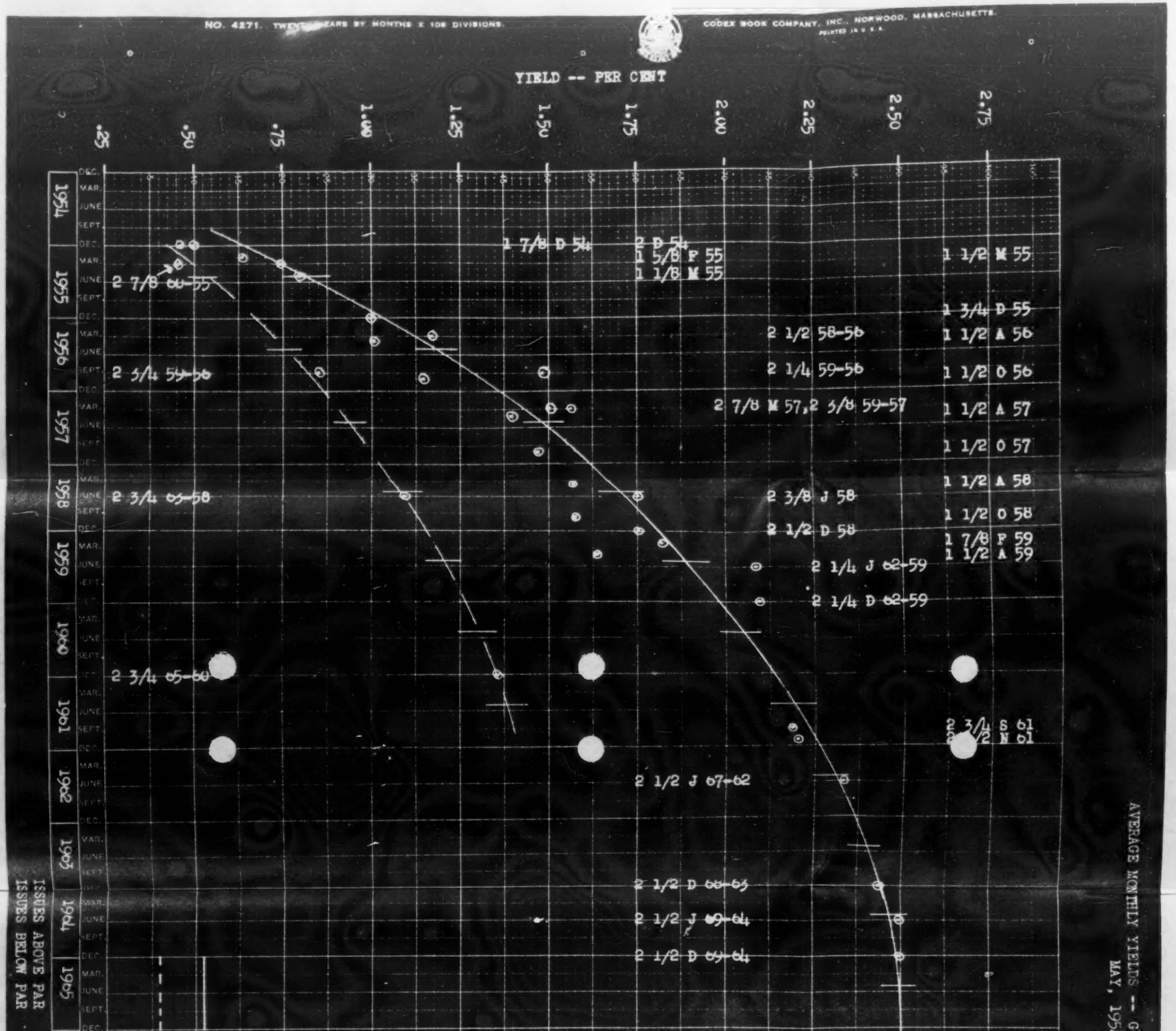
You might find of interest the accompanying chart which we send to various customers each month. This contains the yield curve and a table showing the monthly rate for United States Treasury issues for specified terms ranging up to 25 years.

It is encouraging to know that you are constantly making efforts to improve the quality of Economic Indicators.

Please do not hesitate to contact me if you have any questions relating to the above comments.

Very truly yours,

A. H. KIENDL, *Vice President.*


NO. 4271. TWENTY YEARS BY MONTHS X 10S DIVISIONS.
CODEX BOOK COMPANY, INC., NORWOOD, MASSACHUSETTS.
PRINTED IN U.S.A.
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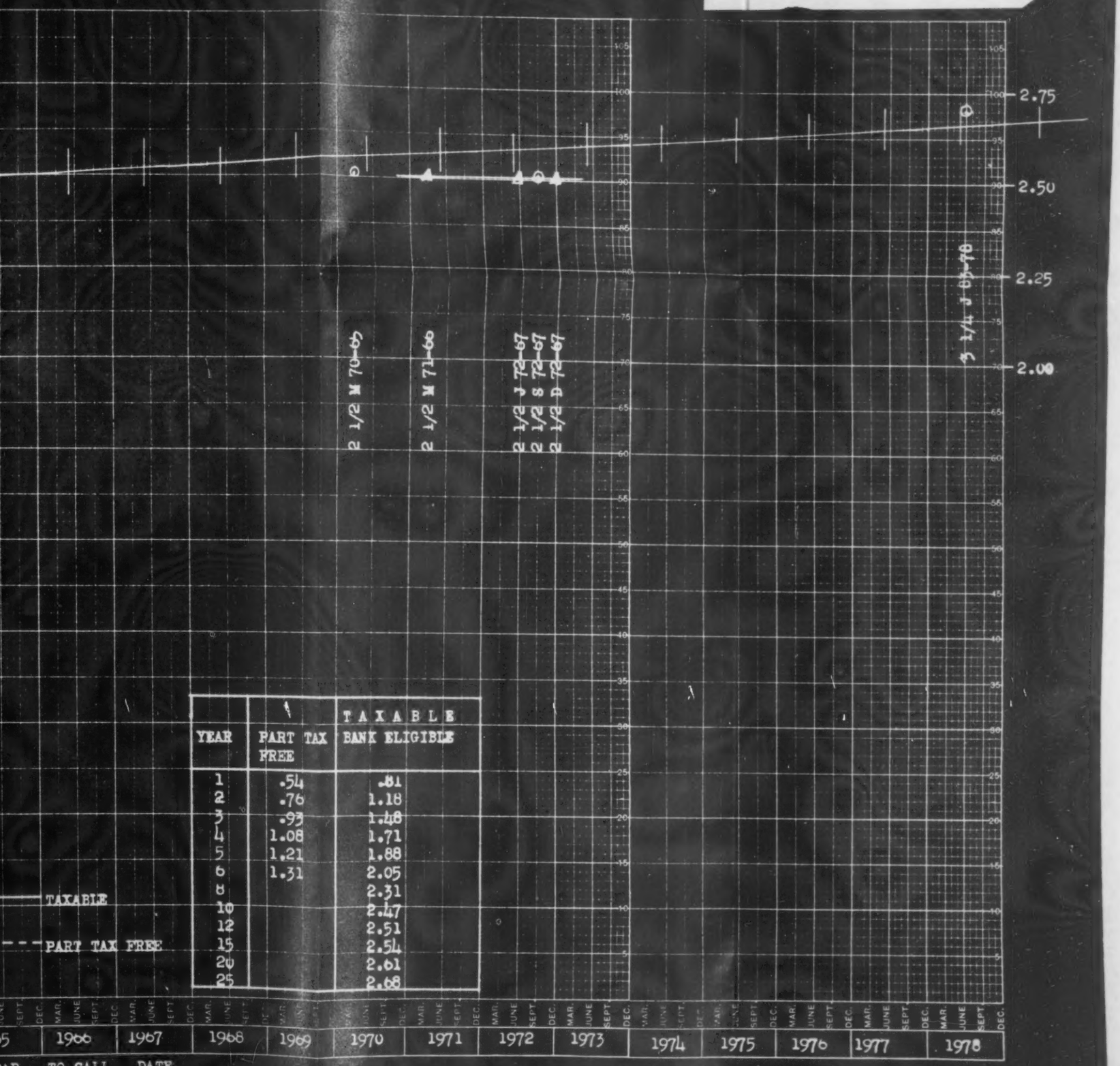

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NEW YORK, N. Y., *June 23.*

GENTLEMEN: I have found the Economic Indicators a very fine and informative pamphlet.

May I offer just one suggestion.

Would it be space-saving and easier for perusal, if you were to print widthwise instead of lengthwise?

If you could constrict your graphs and place them side by side a keener comparison could be made.

As an illustration your topic of "Prices" consumes 4 pages. If you placed them as heretofore suggested, it would be possible to have the entire topic on two open flaps.

I do not know if the proposal is workable, but it might possibly lead to a better suggestion.

Sincerely,

ALAN J. SILVERMAN.

EDISON ELECTRIC INSTITUTE.
New York, June 23, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington, D. C.

GENTLEMEN: This is in response to your invitation for comments from users of Economic Indicators.

First of all, I would like to say that I find this monthly publication extremely useful in my particular work and I sincerely hope that it will be continued.

In my opinion, one of the chief advantages of Economic Indicators is that it brings together in one place the most up-to-date information concerning the various aspects of our national economic picture. Thus, I am able to save time by going to one source and at the same time feel secure in the knowledge that I have obtained the most current and authoritative data.

You will understand, of course, that these comments represent my own personal views rather than an official statement of the institute.

Very truly yours,

NELSON E. LUKEMIRE, *Economist.*

McCANN-ERICKSON, INC.,
New York 20, N. Y., June 22, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington 25, D. C.

GENTLEMEN: According to the May issue of Economic Indicators, your committee is now reviewing its usefulness.

As an economist for business, I find this report extremely useful. May I strongly urge that this service be continued in at least its present form. The compilation of these data from their original sources would be impractical for us to do alone.

There can be little doubt that this is a worthwhile operation and its discontinuance would be a false economy.

Sincerely yours,

ALVIN A. ACHENBAUM,
Account Research Manager.

THE CHASE NATIONAL BANK OF THE CITY OF NEW YORK,
ECONOMIC RESEARCH DEPARTMENT,
New York, June 21, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington 25, D. C.

DEAR SIR: This is written in response to the requests for comments about Economic Indicators. I have been using the report regularly since it first appeared and find it a most useful document. The series it covers, and the manner in which they are presented, fit my needs precisely.

While there are a few items I might like to see added, my general reaction is that it would be better to maintain its present size rather than to expand it to meet everybody's needs as to coverage.

All in all, I think the report is just fine as is, and would vote against any significant changes.

Sincerely yours,

WILLIAM F. BUTLER,
Consulting Economist.

PRENTICE-HALL, INC.,
New York, June 21, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Office Building, Washington 25, D. C.

DEAR SIRS: In response to your request for comment on the series selected and their presentation in Economic Indicators, I should like to make the following suggestions:

1. I believe more attention should be given to the so-called sensitive or leading business indicators, such as new orders, construction contracts, sensitive commodity prices, futures prices, liabilities of business failure, etc. While Economic Indicators does report partially on some of these, it certainly would be valuable for those who are concerned as to where the economy is headed rather than where it has recently been to have important leading indicators reviewed in detail each month. Many suitable data are presently available from either Government or recognized private sources.

2. Similarly, in the chart presentation of the reported series, I should recommend relating most of the leading indicators that would be reported, as suggested above, to relevant coincident indicators. Thus, manufacturers' new and unfilled orders could be charted on the same graph with manufacturers' sales and inventories—for manufacturing as a whole, for durable goods manufacturers, and for nondurable goods manufacturers. Similarly, sensitive commodity prices could be charted on the same graph with the BLS Wholesale Price Index, etc.

3. In the presentation of back annual data for the various series, now given under the respective charts, I have found in practice that it is more important to cover all the postwar years since 1946 rather than to give pre-World War II data (where the series run back that far). For example, on page 16, where expenditures for new plant and equipment are reviewed, the years 1946 and 1947 are omitted, and the years 1939 and 1945 included. For our uses here (and, I imagine, for most businessmen and business analysts), 1946 and 1947 are much more important years than either 1939 or 1945. In view of the higher postwar price level, the 1939 figures have little meaning. The 1945 data are, of course, influenced by wartime and early postwar restrictions on the availability of materials and on construction.

It would, of course, be nice to have all conceivably relevant years included. I, for one, should certainly not object to using a slightly smaller size type to do this, if considered desirable. However, if any years should be sacrificed they should not, in my opinion, be any of the postwar years since 1946.

In the perspective of what Economic Indicators already contains, these suggestions are surely relatively minor ones. The Council of Economic Advisers has done a remarkably fine job in preparing this monthly cross section of the American economy. Your committee is to be congratulated for endeavoring to make it even better.

Sincerely yours,

LEO BARNES, *Chief Economist.*

McCANN-ERICKSON, INC.,
New York, N. Y., June 16, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Office Building, Washington, D. C.

GENTLEMEN: Prior to subscribing to Economic Indicators about 3 years ago we had tried many other sources of such data. In fact, for some time we maintained as a full time job a man in an executive position whose sole responsibility was to read all such source material and digest it for ours and clients' consumption.

Since subscribing to Economic Indicators, we have found this to be unnecessary and depend heavily on this review to keep us and our clients appraised of the economic environment in which they must operate now and in the immediate future.

May I urgently request that this service be continued.

Sincerely,

DONALD B. ARMSTRONG, JR., *Director of Research.*

NEW YORK, N. Y., *June 14, 1954.*

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Washington, D. C.

GENTLEMEN: I am a subscriber to Economic Indicators—and a very well satisfied one.

The information, as given, is ample for my needs and uses. However, some of my clientele are great thirsters for book, chapter, and verse. Would you, therefore, be good enough to write me as to Government publications in which the data embraced by Economic Indicators appear. For example, in quoting the findings to certain of the people, I serve, it would be more useful to them if I could state that figures on new construction appeared in the Survey of Current Business (if they do) rather than merely give the Department of Commerce as the source.

With thanks in advance,
Yours very truly,

CARLISLE DAVIDSON.

NEW YORK, N. Y., *June 8, 1954.*

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Office Building, Washington, D. C.

GENTLEMEN: I noticed that your committee is reviewing the usefulness of Economic Indicators.

May I urgently request that this service be continued approximately the same or in an expanded format? As a businessman with many outside civic activities, I find this report of very great value.

Moreover, it is unique in that the compilation of similar data from other sources would be too laborious and expensive to be practical.

Sincerely,

SIDNEY W. DEAN, JR.

SAGINAW, MICHIGAN, *June 3, 1954.*

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Office Post Office, Washington 25, D. C.

GENTLEMEN: Economic Indicators has solved for me the problem of securing regularly information in condensed form which, for a number of years previously, I had found difficult to obtain otherwise and then only in piecemeal and unsatisfactory form. When I learned of it I immediately subscribed and have renewed my subscription each year since.

In using an issue in current discussion at various times at least three other people have taken down the information about its subscription price.

I believe this useful governmental service would be more widely used if more people desiring this information were aware it was so readily available.

Yours very truly,

CLEMENT P. QUINN.

BACHE & CO.,
RESEARCH DEPARTMENT,
New York 5, N. Y., June 4, 1954.

JOINT COMMITTEE ON ECONOMIC REPORT,
Senate Post Office, Washington 25, D. C.

DEAR SIRS: In response to your invitation expressed in Economic Indicators, May 1954, here are some suggestions with regard to this publication.

Economic Indicators is an extremely useful publication in aiding the business economist in predicting business trends. The series are well selected and presented in convenient fashion. However, a few changes may improve the value of the publication, as follows:

(1) Where monthly averages for past years are given, every year from 1948 on should be included.

(2) After "Wholesale price," page 4, a page should be devoted to the BLS index of 22 sensitive commodities. This index is perhaps more useful than the Wholesale Price Index because it excludes commodities whose prices are administered, or affected by Government price support programs.

(3) On page 6 the SEC indexes of stock prices are given in detail. I realize that the SEC indexes are perhaps scientifically the most accurate of those avail-

able. However, the Dow-Jones industrial average is the one most frequently used in the investment community and should also be given on this page. In addition, an indication of dividend yields on common stocks—such as the series published by Moody's Dividend Yield on 200 Common Stocks—constitutes an indispensable supplement to any analysis of security prices. Moreover, the series customers' debit balances (net) and customers' free credit balances (Survey of Current Business, S–19) should be added to indicate the extent of speculative commitments in security markets. Some of the detailed breakdowns of the SEC composite index might well be omitted.

(4) The data on nonagricultural employment (page 8) might well be omitted. The various series making up the index of industrial production give a more accurate picture of trends in key industries. Instead, it is suggested that a breakdown by States of employment and unemployment data be given. In the present Economic Indicators, series which give a picture of the comparative performance of the various regions of the United States in business activity, are completely lacking.

(5) With respect to page 19, "Inventories and sales," it would be convenient if the ratio of inventories to sales and inventories to new orders could be indicated, with respect to manufacturers' inventories. In order to obtain the necessary space, the two series on department stores inventories and sales on that page might be omitted.

(6) On page 30, "Money supply" time deposits should be excluded from the total for privately held money supply. I realize that this question is a controversial one.

Very truly yours,

WERNER BAER.

NEW YORK 7, N. Y. *June 3, 1954.*

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington 25, D. C.

GENTLEMEN: As a subscriber to Economic Indicators, I note that you call for suggestions relating to the series selected or their presentation.

I would strongly recommend the addition of a series giving data on the total amount of home mortgage debt, and other mortgage debt, outstanding at the end of each quarter, as currently presented in the Federal Reserve bulletin. If the mortgage data could be estimated on a monthly basis, it would be even better.

The inclusion of a series on home mortgage debt would round out the picture on consumer debt, as data on installment and other short-term and intermediate consumer debt are now presented in Economic Indicators.

Another suggestion: why not carry your series, new housing starts, back further than 1949 and leave out some of the monthly figures, so that there would be space for more annual data?

In general, I find Economic Indicators a very concise, timely, and valuable publication.

Sincerely yours,

JOSEPH V. SHERMAN.

THE CHEMSTRAND CORP.,
Wilmington, Del., June 2, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington 25, D. C.

DEAR SIRS: You recently requested suggestions regarding the presentation and nature of the statistical series issued monthly in Economic Indicators.

This excellent publication could be additionally useful if—

(1) Total Government expenditures for goods are separated from expenditures for services; and total military expenditures for goods are separated from civil expenditures.

If this were done, the effect of the changing political situation on the economy could be more easily assessed.

(2) All investment and heavy durable goods category expenditures by the national economy are recorded and totaled together, i. e., one chart and table shows together on the same page the total heavy durable goods and investment expenditures for Government areas, Federal and State; net private domestic investment; and net foreign investment.

If this were done, an interim summary analysis and projection of the economy could be made more quickly and with less calculation.

Very truly yours,

ROBERT L. TEETER.

THE NATIONAL CITY BANK OF CLEVELAND,
Cleveland, Ohio, May 28, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington, D. C.

DEAR SIRS: The May copy of Economic Indiactors invited comments on that publication.

Economic Indicators is an invaluable tool for those interested in current economic trends. The copy I keep on my desk is used constantly and looks mighty battered by the time a new issue arrives. I like Economic Indicators just as it is and have no changes to suggest.

The combination of charts and tables makes this a far more useful publication than the comparable bulletins put out by other Government agencies. Its statistics, furthermore, are usually more up to date than those provided in other bulletins.

There is one criticism that I have to offer, namely, that there apparently are two mailing lists, a preferred early one for Government agencies and a much later one for the rest of us. To illustrate, here in Cleveland the Federal Reserve Bank receives its copy a week or so in advance of when we receive ours at the National City Bank. Should not all the copies be mailed out on the same early date, thereby adding greatly to the usefulness of the publication?

Very truly yours,

JAMES M. DAWSON.

THE CLEVELAND TRUST CO.,
Cleveland, Ohio, May 28, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington, D. C.

DEAR SIRS: I have just received our copy of Economic Indicators for May, and I note that comments are invited.

First, I should like to say that this publication is very useful to our research and economics department as a handy reference source of important statistical information. One great advantage is that the data can be found quickly, without the necessity of hunting through our various other sources. Also, the charts are valuable in furnishing a picture of the trend of any particular series.

I have only one suggestion. We find that the figures on total national income (p. 21) have no current value because of the lengthy delay in showing corporate profits. These seem to run 2 or 3 months behind the rest of the national income data, which are already late enough. Would it be possible to put out an advance estimate on corporate profits based on partial information, such as is now being done by the Department of Commerce on total retail sales?

Very truly yours,

D. C. ELLIOTT, *Vice President.*

REVERE COPPER AND BRASS, INC.,
RESEARCH DEPARTMENT,
Rome, N. Y., May 28, 1954.

Re Economic Indicators.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington, D. C.

GENTLEMEN: Referring to your recent request for suggestions covering your very excellent publication, please note the following.

1. The chief value of your, or any similiar, charts is to show comparative rates or percentages of change of related statistics.

2. This is best done by using ordinates in the logarithmic scale.

3. You can also take in a greater range on the vertical scale in the same space or size of chart.

4. This should enable you to show more of your data on the same size and scale chart. As it is now, most charts are differently scaled.

5. This would make it easier to single out those items in the different charts that bear some relation to apparently unrelated items on other charts—a useful study in itself.

6. There is no fixed relation between the length of the time scales you use for your horizontal (or abscissae) lines and the scales on your vertical lines. The result is your curve variations are not comparable as between certain charts.

7. The statement is made that business executives, etc., do not understand the logarithmic scale. The answer to this is that no attempt should be made to explain it to them. They understand it readily enough when they subscribe to some stock analyses services, see attached sample, which give them no other kind of chart.

8. The main drawback to logarithmic charts is that you cannot start from a base line of 0 (zero). You can get around this by rearranging those charts in which this is likely to occur.

9. When is the Government going to get in step with the rest of the business world, the American Standard's Association and others, and get on the 8½ by 11 basis for their publications? Your publication should be this size and punched (3-hole) for ring-binder use. The larger size would allow you to use larger charts, which you badly need.

10. There are no doubt other statistics you could add to your bulletin such as those currently published in trade and trade association publications, weekly newspapers, etc. Commodity prices and futures would be of interest. You will no doubt receive many suggestions along this line.

11. You have an excellent and timely publication, but you are not making the most of the figures you gather.

Yours very truly,

G. C. MUTCH.

SEATTLE-FIRST NATIONAL BANK,
ECONOMIC RESEARCH DEPARTMENT,
Seattle, Wash., May 27, 1954.

Mr. GROVER W. ENSLEY,
Staff Director, Joint Committee on the Economic Report,
Washington, D. C.

DEAR MR. ENSLEY: As you requested I am sending along a copy of our recent report on Alaska, as well as the January quarterly issue and last year's annual review of our Summary of Pacific Northwest Industries.

I note on the cover of the May issue that you are reviewing the contents of Economic Indicators. May I cast one vote in favor of continuing it substantially in the present form. I find it the most useful and usable single source of information on the national economy. Both the selection of data and the method of presentation are excellent.

Yours very truly,

MINER H. BAKER.

CALIFORNIA TAXPAYERS' ASSOCIATION,
Los Angeles 14, May 27, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Office Building, Washington 25, D. C.

GENTLEMEN: This is pursuant to Comments Invited box on the front of Economic Indicators for May 1954.

A copy of Economic Indicators goes to each of our fieldmen monthly. We consider it a very valuable document on economics.

Our only major recommendation to it is that the series Business Failures and Liabilities should be included.

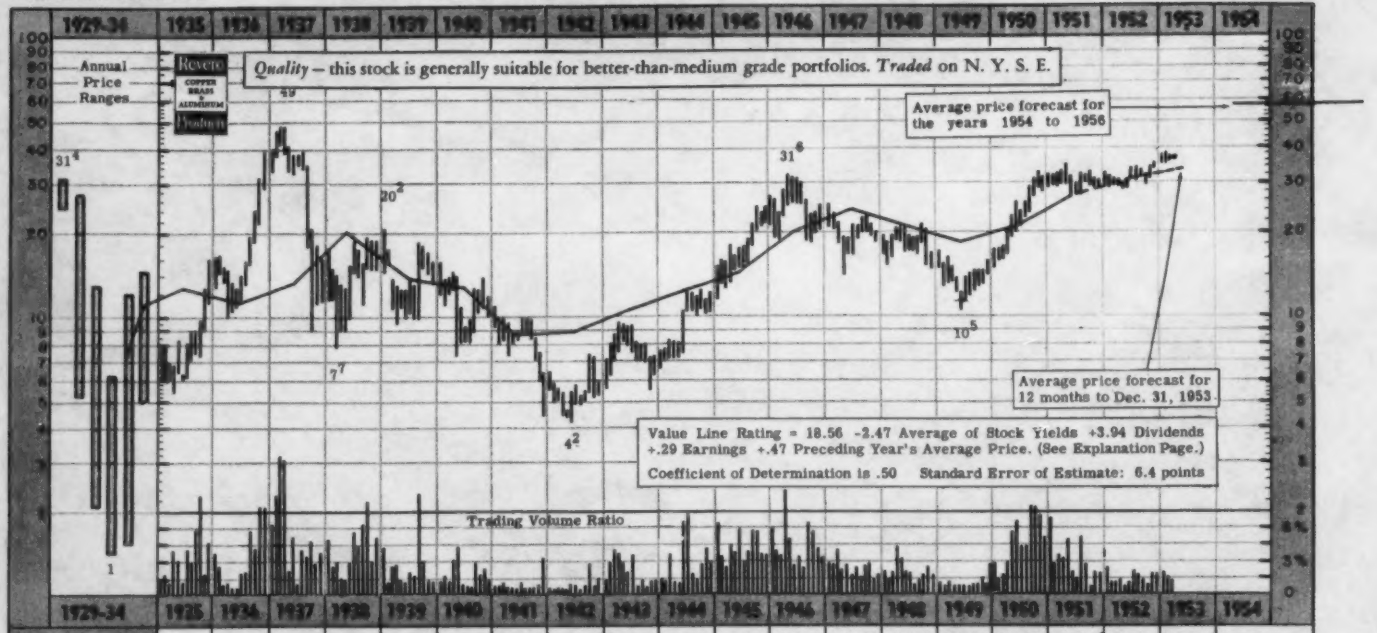
Yours truly,

J. ROY HOLLAND.
Director of Research.

VALUE LINE RATING & REPORT

REVERE COPPER & BRASS (RVB)

MARCH 30, 1953



	1929-34	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	
SALES		26.0	37.1	47.5	25.5	41.9	67.7	112.8	121.4	141.0	143.8	119.7	116.1	152.2	150.5	117.3	175.7	180.9	187.8	205E		$ Mill.
PROFIT MARGIN		9.2%	12.4%	5.5%	--	10.0%	12.0%	17.6%	13.9%	11.0%	11.0%	7.2%	8.6%	9.8%	8.8%	8.5%	14.2%	13.6%				
PLANT ACCOUNT		16.9	16.8	17.5	17.2	16.6	16.2	16.2	14.6	13.2	11.9	8.7	15.3	16.5	19.4	20.8	21.5	22.5				$ Mill.
WORKING CAP'L		10.2	12.0	10.8	8.7	10.9	12.9	14.7	15.5	17.7	20.7	24.2	25.4	27.5	26.5	27.6	25.8	29.4				$ Mill.
BOOK VALUE		--	--	--	--	--	--	10.49	11.11	12.67	14.88	15.68	21.65	25.46	29.13	31.20	36.61	39.50				$ a Sh.
AV. EARN. YIELD		--	7.7%	--	--	1.5%	22.4%	31.4%	15.9%	10.9%	18.2%	5.2%	14.9%	29.2%	27.8%	26.0%	37.5%	17.8%				Per Sh.
AV. DIV'D. YIELD		--	--	--	--	--	--	--	--	--	--	--	1.0%	4.9%	6.9%	10.9%	11.1%	8.3%				Per Sh.

EARNINGS PER SHARE

Dividends Declared

Developments: A big gain in earnings is forecast for 1953. Reasons: (1)

BOOK VALUE	--	--	--	--	--	--	10.49	11.11	12.67	14.88	15.68	21.65	25.46	29.13	31.20	36.81	39.50		$ a Sh.
AV. EARN. YIELD	--	7.7%	--	--	1.5%	22.4%	31.4%	15.9%	10.9%	18.2%	5.2%	14.9%	29.2%	27.6%	26.0%	37.5%	17.8%		Per Sh.
AV. DIV'D. YIELD	--	--	--	--	--	--	--	--	--	--	--	1.0%	4.9%	6.9%	10.9%	11.1%	8.3%		Per Sh.

EARNINGS PER SHARE

	1st Q.	2nd Q.	3rd Q.	4th Q.	Year	Dividends Declared
1939					$3.31	--
1932					d9.09	--
1935					--	--
1934					1.34	--
1937	1.98	.58	d .45	d4.30	d2.19	--
1938	d2.42	d2.54	d1.78	.02	d6.72	--
1939	d .41	d .98	d .10	1.69	.20	--
1940	.81	.34	.06	1.52	2.53	--
1941	1.20	1.66	.93	d1.15	2.64	--
1942	.64	d .13	.77	d .42	.86	--
1943	.56	d .10	.16	.21	.83	--
1944	.21	.26	.14	1.11	1.72	--
1945	.45	.42	d .30	.34	.91	--
1946	d .36	1.04	1.52	1.41	3.61	$ .25
1947	1.86	1.66	1.40	1.01	5.93	1.00
1948	1.25	1.11	1.23	1.43	5.02	1.25
1949	1.11	.10	.83	1.52	3.56	1.50
1950	1.53	2.05	2.87	2.02	8.47	2.50
1951	1.71	1.54	.64	1.49	5.38	2.50
1952	1.34	1.12	1.26	1.53E	5.25E	2.50
1953					7.50E	2.50-3E
1954						

Funded Debt -- **Interest** --

Pfd. Stock -- **Dividend** --

Common Stock 1,286,916 shares

Busin Revere mill products of copper, brass, bronze, copper-nickel alloys, aluminum and steel are sold to the automotive, electrical, chemical, marine, food, building, housewares, jewelry industries, etc. State of incorporation: Maryland.

	DIVIDEND RECORD ◊ Dividends paid in three months ended				QUARTERLY SALES RECORD ($ millions)			
	Mar. 31	June 30	Sept. 30	Dec. 31	1st Q.	2nd Q.	3rd Q.	4th Q.
1947	.25	.25	.25	.50	38.2	36.4	38.7	37.2
1948	.25	.25	.25	.75	36.7	22.2	24.8	33.5
1949	.25	.25	.75	1.25	36.0	45.5	45.8	48.8
1950	.50	.50	.50	1.00	53.8	46.1	36.0	45.0
1951	.50	.50	.50	1.00	45.2	43.2	43.7	55.7
1952	.50							

◊-Dividend payment dates: Mar. 1st, June 2nd, Sept. 2nd, Dec. 1st.

Developments: A big gain in earnings is forecast for 1953. Reasons: (1) Sales should increase in reflection of expanded plant facilities and an improving copper supply situation. (2) Margins will benefit from the removal of price controls on fabricated products. (3) The forecast lapse of the excess profits tax on June 30th will add an estimated $1.60 a share to earnings this year. . .Current plans call for capital expenditures in 1953 to at least equal the $7 million spent in 1952. Although the cash flow from depreciation and retained earnings should be moderately in excess of this sum, conservative practice plus the need for rebuilding inventories may preclude any increase in dividend payments this year. . .Increased sales of consumer products and expanded aluminum fabricating operations are expected to more than offset the probable decline in defense production after 1953. Accordingly, we look for sales to rise to an average of $220 million a year in the mid-Fifties. Operating margins are likely to contract, however, as a result of the more competitive conditions expected to exist in those years. Thus, even though the restrictive influence of the E. P. tax is expected to be absent throughout the period, we anticipate only a nominal increase in earnings to an annual average of $7.65 a share. A tapering off in capital outlays should permit average dividends of $4 a share.

	1942-51 (10 Year) Average	1947-51 (5 Year) Average	Recent Actual	Year to 12-31-53 Average Estimated	1954-56 Average Estimated
Price:	16.9	21.0	36	33	57†
Earnings Yield:	20.3%	27.6%	20.8%*	22.7%**	13.4%
Dividend Yield:	4.3%	8.4%	6.9-8.3%*	7.6-9.1%**	7.0%

†-This price, if realized, would be 58% above the recent actual.
*-Based on earnings, dividends est. for year to 12-31-53 and recent price.
**-Based on earnings, dividends est. for year to 12-31-53 and est. price.

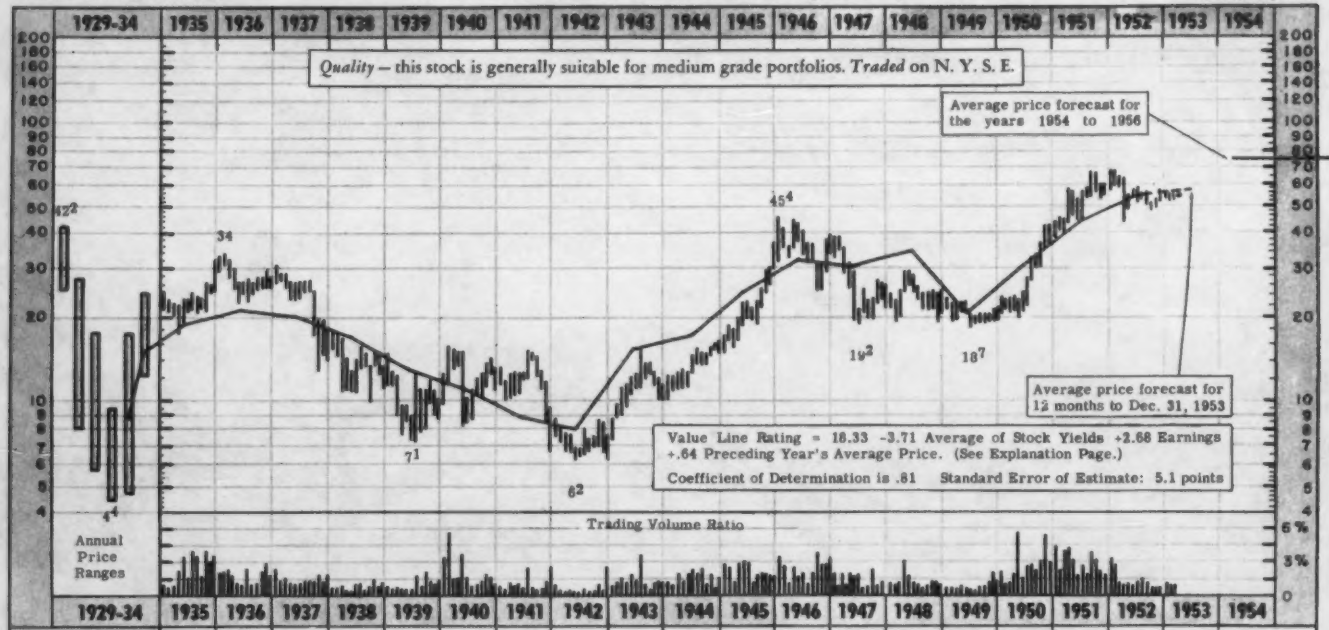
Position: At 36, the stock continues to stand above its Rating. However, since the Rating is rising moderately and since it is normal for a stock to advance ahead of an ascending Rating, moderate further appreciation may reasonably be expected. . .The longer term prospect is for an average price 58% higher than at present. For the years 1954-56, we foresee an average price of 57 based on a capitalization of forecast average earnings at 13.4% and forecast average dividends at 7.0%.

Recommendation: Buy/hold for generous dividend income and wide capital appreciation over the long pull. The stock does not qualify as a defensive issue.

VALUE LINE RATING & REPORT

REYNOLDS METALS (RLM)

MARCH 30, 1953



	1929-34	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	
SALES		12.5	16.9	20.2	15.0	20.5	29.2	48.6	86.1	138.1	165.2	148.3	131.0	129.3	149.2	131.9	166.9	215.7	234.7	290E		$ Mill.
PROFIT MARGIN		9.6%	12.4%	6.9%	1.3%	6.3%	9.9%	8.2%	14.5%	15.1%	12.9%	9.5%	11.5%	8.4%	13.5%	11.8%	21.3%	27.6%				
PLANT ACCOUNT		5.2	6.3	7.5	7.8	8.2	11.3	29.7	34.6	32.5	28.2	29.1	44.9	39.9	40.0	101.2	103.9	152.4				$ Mill.
WORKING CAP'L		7.8	7.1	5.6	5.7	6.5	9.0	12.2	19.6	19.9	22.4	32.7	42.4	37.7	38.5	32.0	44.0	51.5				$ Mill.
BOOK VALUE		9.57	9.08	9.24	9.25	10.42	12.28	14.99	15.85	18.78	19.96	28.16	34.38	33.61	36.28	39.93	44.19	52.69				$ a Sh.
AV. EARN. YIELD		5.5%	7.3%	5.2%	2.1%	12.1%	17.5%	21.4%	14.7%	29.6%	20.1%	18.2%	14.1%	10.2%	29.8%	20.5%	31.6%	20.5%	15.8%			Per Sh.
AV. DIV'D. YIELD		4.4%	3.7%	4.3%	1.1%	--	2.5%	--	6.8%	6.7%	5.6%	4.5%	2.1%	3.8%	5.7%	5.4%	4.3%	2.1%	1.8%			Per Sh.

EARNINGS PER SHARE

	1st Q	2nd Q	3rd Q	4th Q	Year
1950	.61	.80	1.00	1.10	3.51
1951	1.10	1.20	1.20	1.20	4.70
1952	1.20	1.20	1.20	1.20	4.80
1953	1.20				

Dividends Declared

Developments: Current expansion plans call for a near doubling of pre-Korean ingot capacity. Upon completion of the build-up late this year, Rev

BOOK VALUE	9.57	9.08	9.24	9.25	10.42	12.28	14.99	15.85	18.78	19.96	28.16	34.38	33.61	36.28	39.93	44.19	52.69		$ a Sh.
AV. EARN. YIELD	5.5%	7.3%	5.2%	2.1%	12.1%	17.5%	21.4%	14.7%	29.6%	20.1%	18.2%	14.1%	10.2%	29.8%	20.5%	31.6%	20.5%	15.8%	Per Sh.
AV. DIV'D. YIELD	4.4%	3.7%	4.3%	1.1%	--	2.5%	--	6.8%	6.7%	5.6%	4.5%	2.1%	3.8%	5.7%	5.4%	4.3%	2.1%	1.8%	Per Sh.

EARNINGS PER SHARE

	1st Q.	2nd Q.	3rd Q.	4th Q.	Year	Dividends Declared
1929					$3.70	$ .28
1932					1.14	1.00
1935					1.26	1.00
1936					1.98	1.00*
1937	.48	.52	.50	d .29	1.21	1.00
1938	.09	.07	.15	d .02	.29	.15
1939	.12	.22	.25	.63	1.22	--
1940	.52	.63	.63	.32	2.10	.30
1941	.86	.85	.33	.49	2.53	--
1942	.78	d .17	.06	.40	1.07	.50
1943	.87	1.06	.93	.65	3.31	.75
1944	.83	1.10	.88	d .10	2.71	.75
1945	1.32	1.33	.05	1.33	4.03	1.00
1946	d .29	.08	3.15	2.00	4.94	.75
1947					2.68†	1.00*
1948	1.12	1.25	1.55	3.14	7.06	1.35*
1949	2.62	d .04	d .03	1.65	4.20	1.10
1950	1.11	1.75	2.19	3.30	8.84	1.20*
1951	3.88	3.12	1.38	2.20	10.58	1.10
1952	2.23	1.88	1.39	3.21	8.71	1.00*
1953					8.60E	1.00E
1954						

Funded Debt $182.6 million **Interest** $6.5 million

Pfd. Stock $2.2 million **Dividend** $.123 million
22,445 shares 5 1/2% cumulative ($100 par) convertible into 3.5973 common shares

Common Stock 1,677,118 shares

Business: Reynolds Metals is the second largest U. S. aluminum enterprise. Accounts for about 35% of U. S. primary production. Company's fully integrated. Substantial bauxite reserves in U. S., Haiti and Jamaica. State of Incorporation: Delaware.

DIVIDEND RECORD # (Dividends paid in three months ended)					QUARTERLY SALES RECORD ($ Million)			
	Mar. 31	June 30	Sept. 30	Dec. 31	1st Q.	2nd Q.	3rd Q.	4th Q.
1948	--	.25	.25	.85*	34.8	35.4	37.6	40.0
1949	--	.25	.25	.60	38.8	27.8	28.0	37.2
1950	--	.25	.25	.70*	33.5	37.9	42.4	53.3
1951	--	.25	.25	.60	59.0	53.2	52.2	51.3
1952	--	.25	.25**	.50	57.2	57.1	56.7	63.7
1953	--	.25						
1954								

#-Dividend payment dates: Apr. 1st, July 1st, Oct. 1st, Dec. 24th.
†-Excludes $9.6 million ($8.50 a share) realized from sale of half interest in Robertshaw-Fulton. *-Plus 25% in stock in 1934 and 10% in 1947, 1948, 1950 and 1952.

Developments: Current expansion plans call for a near doubling of pre-Korean ingot capacity. Upon completion of the build-up late this year, Reynolds' capacity will stand at 415 million tons vs. 226 million in June 1950. Long-term government purchase contracts practically guarantee full-scale utilization of the new facilities through 1956. Yet, despite the prospect of capacity operation of an expanded plant base, a lower level of earnings seems indicated. In return for government guarantees to purchase any of the output of the new facilities not absorbed through regular market channels, the company has agreed to sell two-thirds of the increased production in bulk form either to the government or to independent fabricators. Since the profit spread on bulk ingot production is much lower than on finishing operations, operating margins will suffer. Meanwhile, because of the fast write-off privilege granted on most of the new construction, depreciation charges in the mid-Fifties will average approximately $33 million a year compared to less than $8 million in 1951. Therefore, although Reynolds is in the process of building a much larger earning power, the benefits will not be reflected in reported earnings for a good many years to come. For 1954-56, we forecast average earnings of $8 a share on sales of $330 million. . .Loan restrictions currently limit dividends to roughly $1 a share. Rapid debt retirement, however, is expected to result in an improved financial position and a resultant easing of the dividend restriction. Nevertheless, the presence of the restriction plus the large nearby debt maturities probably will serve as a check to any immediate increase in dividends. We now estimate average dividends for the 1954-56 period at $2 a share vs. $3 previously.

	1943-52 (10 Year) Average	1948-52 (5 Year) Average	Year to 12-31-53 Recent Actual	Year to 12-31-53 Average Estimated	1954-56 Average Estimated
Price:	28.8	35.8	55	57	75†
Earnings Yield:	21.0%	23.6%	15.6%*	15.1%**	10.7%
Dividend Yield:	4.2%	3.9%	1.8%*	1.8%**	2.7%

†-This price, if realized, would be 36% above the recent actual.
*-Based on earnings, dividends est. for year to 12-31-53 and recent price.
**-Based on earnings, dividends est. for year to 12-31-53 and est. price.

Position: Unchanged in price since our last review, the stock stands just under its Rating which is now leveling out after a long advance. No significant appreciation appears in prospect over the near-term. . .Over the longer term, worthwhile appreciation is indicated by a normal capitalization of the average earnings and dividends we forecast for the mid-Fifties. Recommendation: May be held for long-term growth and appreciation in accounts not primarily interested in current income. This is not a good defensive holding.

THE NATIONAL BANK OF JACKSON,
Jackson, Mich., May 25, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington 25, D. C.

GENTLEMEN: I have been subscribing to Economic Indicators for almost 2 years and use it every month in preparing economic data for the president of our bank and the board of directors.

In my opinion, it is the most useful publication published by any source, and I feel sure that it must be good when so many people share my opinion concerning its value. It gives much information which could be obtained only from a great number of sources prior to the time it was published. In talking with other people who are interested in studying economic forecastings, I find that almost without exception it is considered the primary reference in connection with any research material that is used in this field.

I trust that your committee will do everything possible to see that the necessary funds are forthcoming to insure that this publication is made available, on a continuing basis, to those interested in current economics.

Yours very truly,

HOMER HILTON, JR.,
Personnel Director.

S. C. JOHNSON & SON, INC.,
Racine, Wis., May 25, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington 25, D. C.

GENTLEMEN: On the cover of the May issue of Economic Indicators you invited subscribers to your publication for comments. I have been subscribing to this publication almost from the time it was originally issued for public consumption, and I found it a most valuable document. In fact, I have bought as many as 80 copies at a time to distribute among executives at conferences I have led.

There are always some charts and statistical data which an individual researcher might wish to see in such a publication, but to me the value of the document would be somewhat lessened if it became too large. For example, I would have liked to have seen figures and a chart on the liabilities of business failures and also one on orders of manufacturers, but I would prefer keeping the Economic Indicators in its present form rather than get it too large.

Very sincerely yours,

RICHARD O. LANG,
Economist and Business Research Manager.

THE PRUDENTIAL INSURANCE CO. OF AMERICA,
Newark, N. J., May 25, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington 25, D. C.

GENTLEMEN: I find Economic Indicators far and away the most valuable statistical release prepared by any Government agency. The particular economic series selected for inclusion in this report are those which are most helpful in keeping abreast of current economic developments, and the value of the report is further enhanced by the speed with which these figures are released.

I have no suggestions for improvement of the report.

Very truly yours,

GORDON W. MCKINLEY.

HOBSON'S FARM FORECAST,
Pullman, Wash., May 25, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington 25, D. C.

DEAR SIRS: This is in response to your request for comments on the contents of your publication Economic Indicators.

First I wish to say that I feel that you are doing an outstanding job with this publication. It brings together in one place and at regular monthly intervals most of the important data that show how our economy is working. The im-

portant thing is that it's presented in a clear, readable form which can be completely reviewed in a few minutes' time.

I have only one suggestion to offer: That you include a series on the spot primary market price index compiled by the Bureau of Labor Statistics. This index is more sensitive than the wholesale price index you are using. It is more of a leader—a better indication of where we are going. I would not like to see it displace the wholesale price index; I would just like to see it added.

Sincerely yours,

KARL HOBSON.

THE MAGAZINE OF WALL STREET,
New York, May 26, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington, D. C.

GENTLEMEN: With regard to Economic Indicators, I would suggest that you include the series on new orders of manufacturers which is very important.

I understand that figures on new orders are also available on a weekly basis; at least H. J. Nelson, in his weekly column in Barron's (p. 2 every week) mentions such a series for various industries from time to time. Can anything be done about using such a weekly series on new orders?

Thank you for considering this matter.

Very truly yours,

ALBERT SHASSOL, *Statistician.*

MONSANTO CHEMICAL CO.,
Springfield, Mass., July 9, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Capitol Building, Washington, D. C.

GENTLEMEN: The joint committee has asked for suggestions relating to the statistical series published in Economic Indicators.

We have just recently put together a report entitled "Business Conditions in the United States Economy in an Era of Government Countermeasures," which report represents our first attempt to do an overall analysis of the economy including methodology of forecasting, long-range forces in the economy, and short-range outlook. We are enclosing a copy of this report with certain deletions eliminating as many references as we could to people and our company.

If you grant us this methodology and this approach to business conditions, there are then certain implications regarding statistical series necessary for the analysis of the economy.

Please realize we are not sending this report to you as anything final in the area of economics and its methodology, but rather it represents our first attempt in this field and the implications from this first attempt. We realize that any number of sectors could be covered much better by specialized study.

The report itself is written for a business audience rather than for economists. The report is not an official forecast for our company but it was rather the result of work carried on by ourselves.

The model has certain inconsistencies which we are aware of. If you do have a chance sometime, we should appreciate very much any comments that you might care to make on the overall methodology and approach found in it.

Based on this analysis, we should like to make the following recommendations on data for Economic Indicators for the national accounts.

1. In the past, we have asked the Department of Commerce, and to our knowledge there is not available, for a set of code numbers for the national accounts. With the economy as complex as it is, we are forced arbitrarily to assign code numbers to the accounts. It would be much more logical to have a set of code numbers officially designated by the Government to apply to these accounts. In this way they can be handled by hand by code, or they could be handled on punched cards. No company could operate without accounts being coded.

2. In terms of minimizing work, it would be logical to us if all the monthly series in Economic Indicators could be totaled or averaged by quarter so that each one of these monthly series could be tied in with the national accounts which are in quarterly form without further arithmetic operations.

3. While the expenditure side of the national accounts is handled thoroughly in Economic Indicators, we need complete figures on the income side. On page 1 of Economic Indicators you have graphs showing the income and expenditures of each sector of the economy. This approach follows the approach used in our report. Yet the graph is not documented completely on the income side by figures in Economic Indicators. In particular, we feel that the income of each sector should be broken down into enough components so that it can be tied in with action or legislation occurring in the economy. In particular did we have trouble in getting orderly figures for income in the Government sector on a national account basis broken down in sufficient detail so that various tax programs proposed in Congress or by the executive branch could be converted directly into national account figures.

4. The figures for the Government sector on the income side on a national account basis we realize are extremely seasonal. It might be necessary to provide both seasonally unadjusted and adjusted data on a quarterly basis up to date as much as possible.

5. We are not sure how big a book you would want to make Economic Indicators but if you want to expand it in terms of coverage, we might suggest that you add data from the consumer expectations surveys by the Federal Reserve Board, for installment credit extended and repaid, and perhaps for the moneyflow data after it becomes available from the Federal Reserve Board, assuming it is kept up to date.

We feel that this work on improving statistical series for business conditions in the economy as a whole is very worth while, and we should be glad to contribute in any way possible.

Very truly yours,

Bob,
R. W. CRAWFORD,
Manager, Business Research.

UNITED RUBBER, CORK, LINOLEUM AND PLASTIC WORKERS OF AMERICA,
Akron, Ohio, July 16, 1954.

JOINT COMMITTEE ON THE ECONOMIC REPORT,
Senate Post Office, Washington, D. C.

GENTLEMEN: This is in response to your recent request for comment from users of Economic Indicators.

I have found this monthly publication to be an excellent summary of the key economic facts which are necessary to an understanding of the trends in our economy. I would not like to see it changed or modified to any substantial degree.

My main suggestion is that you provide some additional data concerning the gross national product figures. Specifically I would like to see these figures expressed in terms of constant dollars. Such an adjustment would provide a more meaningful year-by-year comparison than at present.

I have no other comment at this time.

Sincerely yours,

RALPH H. BERGMANN,
Assistant Research Director.

Representative TALLE. Speaking for the committee, Dr. Burns, I want to thank you sincerely for appearing here as our witness. We were delighted to have you. We feel not sadder but wiser men because of your testimony.

Mr. BURNS. Thank you very much.

Representative TALLE. The subcommittee will stand adjourned until tomorrow morning.

(Whereupon, at 3:40 p. m., the subcommittee adjourned, to reconvene at 9:30 a. m. Tuesday, July 13, 1954.)

ECONOMIC STATISTICS

TUESDAY, JULY 13, 1954

CONGRESS OF THE UNITED STATES,
JOINT COMMITTEE ON THE ECONOMIC REPORT,
SUBCOMMITTEE ON ECONOMIC STATISTICS,
Washington, D. C.

The subcommittee met, pursuant to recess, at 9:30 a. m., in room 1301, New House Office Bulding, Representative Henry O. Talle (chairman of the subcommittee) presiding.

Present: Representatives Henry O. Talle (presiding) and Richard Bolling.

Also present: Grover W. Ensley, staff director, and John W. Lehman, clerk.

Representative TALLE. The Subcommittee on Economic Statistics of the Joint Committee on the Economic Report will begin the second day of its hearings.

I have an old Scotch friend who once told me that his father, when starting his day's work, would say a little prayer, "Oh, Lord, start me out right, for Thou knowest Thou canst not change me."

I think the committee started out right yesterday in hearing the message from the Bureau of the Budget and the message from Dr. Burns. This is the day for the second part of that prayer. The users of statistics will be heard and they are free to advocate change.

That is a pretty serious matter always and if I were a clergyman, I think I would select this day's text from the Old Testament saying: "In the multitude of counselors there is safety."

So we are starting out with a panel this morning. Before introducing the gentlemen and the lady who will testify, the committee would like to welcome all of our distinguished panel members and visitors, too, and express to the panel members the appreciation of the subcommittee for their contributions to this important field of our work.

I regret that the extremely intensive schedule of the Congress at this time requires us to compress this presentation into a one-day session. In fairness to all participants, the chairman will be obliged to be most rigorous in enforcing the 15-minute rule mentioned in the letter of invitation. In defense of that rigorous limitation of time, I may say that in the House of Representatives we operate under the 5-minute rule. As you know, your full statements and any supplementary materials will go into the record if it is agreeable with the other member of the subcommittee. At this point I must say that Senator Carlson is obliged to be absent—he is in attendance at the funeral of Mrs. Milton Eisenhower in Pennsylvania. We regret his absence, but we understand.

So if it is agreeable with Congressman Bolling, each panel member will be asked to read his summary statement without interruption and we will go through all the prepared statements before beginning the panel discussion.

I hope it will be possible at some stage in the hearing to have a brief comment from Government representatives who have been invited to be present.

There will be 6 panel speakers as scheduled this forenoon and 6 in the afternoon. If it is possible to press more into the forenoon than the 6, we will do so. That would afford more time for discussion in the afternoon.

It is my pleasure now to introduce as the first panel speaker, Mr. Martin R. Gainsbrugh, chief economist, National Industrial Conference Board, Inc.

I remember, Dr. Gainsbrugh, you were a very good witness at the hearings of the joint committee in February of this year.

Will you proceed in your own way.

STATEMENT OF MARTIN R. GAINSBRUGH, CHIEF ECONOMIST, NATIONAL INDUSTRIAL CONFERENCE BOARD, INC., NEW YORK, N. Y.

Mr. GAINSBRUGH. Thank you, sir.

My statement is not only compressed, but I suspect dehydrated.

These brief opening remarks look at Federal economic statistics less in the light of standards of perfection than in the perspective of the current need for economic intelligence, both in Government and in business, and the budgetary resources available to meet those needs. Let me make my position clear right at the outset by commending rather than criticizing the data being put out by the various statistical agencies. On balanced judgment, one cannot help being impressed with the comprehensive statistical picture with which we have been provided over the past year of the changes in our economy. Month by month, we have been able to follow with unprecedented detail the course of the mild recession which began last summer, and with greater accuracy, with the benefit of hindsight, in determining its mild character than in any past business contraction.

This general appreciation of the Federal statistical program is shared by many associates of the Conference Board as reflected in their response to a questionnaire which we recently sent to them. Knowing about these hearings, we sent this questionnaire out to our associates 3 weeks ago.

In its regular survey of executive opinion, the Conference Board canvassed a cross section of its associates on their uses of economic statistics, their evaluations of them, and suggestions for their improvement. Unfortunately, the replies have not yet been fully tabulated—the complete results should be available to this committee shortly—and we will submit them—but I can give you the most frequently voiced opinions gathered from a quick reading of the first hundred replies. (The tabulations submitted appear at the end of Mr. Gainsbrugh's statement). There are four general comments that emerged from my first reading.

1. In general, business executives are far more concerned with specific industry statistics than with general economic statistics. This reflects the fact that many of our respondents—at least in this survey—are executives of smaller companies with immediate interest in conditions in their own industries. With respect to broader economic questions, they apparently rely upon the opinions of the various economic services, such as the Conference Board, or of their own economists and consultants, upon a wide battery of business statistics, and personal appraisals of both. Among the economic statistics cited most frequently in our survey were those on prices—the BLS Consumer Price Index was mentioned more than any other Government statistic; employment, weekly hours, and wages—all of these products of the BLS; industrial production—FRB; data on sales, inventories, new orders, and the national income and product accounts—Commerce.

2. With reference to special purpose data for specific industries, of particular interest to narrow segments of business (similar to Facts for Industry), there was fairly general agreement that such statistics should be produced by appropriate trade associations wherever possible. The determining factor, however, would seem to be to have the job done where it can be done best; there is a fair sampling of opinion which is prepared to have the Government undertake the responsibility for such industry statistics with the cost being borne by the appropriate industry, as is already apparently being done by Facts for Industry in numerous instances.

I should add two reservations which were entered against this procedure. First, it was noted that private industry is already bearing a considerable portion of the total cost of the Government's statistical program through the reporting efforts of individual companies. Second, it was also noted that many of the industry statistics are essential prerequisites to broader statistical programs and, therefore, their costs should not be assessed solely against a given industry.

3. Perhaps most pertinent to this hearing—and this was a surprising finding to me—our respondents were not overly concerned by and lack of timeliness of the Government's economic statistics in general. As one respondent put it, we wait breathlessly for the latest weekly or monthly report, and then say that 1 week or month is not significant, anyhow. Another added, in a period such as the present minor fluctuations receive far more publicity than their nature or magnitude merit. Many others added they expected the experts to improvise and correct for timing and gaps in current data. In the main, they did not stress lack of timeliness of Government statistics.

It is true that a substantial number of our associates did express much interest in the development of flash reports, particularly that which has recently been developed for the retail trade. They indicated that information on current trends—the overall figures—derived from such measures is more important to them than the greater detail which subsequently becomes available. Several respondents also suggested that the use of first-class mailing would speed up the flow of current statistics, and were prepared to pay for this service; also, the use of mimeographed material for quick release rather than printing; also, contract arrangements for telephoning. But the central point I make is that they were not overly

concerned by a lack of timeliness in the Government's statistical program in general.

4. The most commonly voiced criticism of the Government's statistical program was the infrequency of benchmark tabulations—particularly the census of manufactures, which has not been conducted since 1947—and the long delays in their publication. There seem to be two pressing needs in industry for these benchmark data. First, the geographic and industry detail which they provide are essential in sales and market analysis. The existing data, based on sampling, do not permit this fine pinpointing. Secondly, and perhaps even more important, the census materials provide reference or check points for the industry statistics which trade groups currently compile on a sample or limited-coverage basis.

The notable improvements in economic data and economic understanding to which I have referred have not, of course, developed suddenly. They have emerged from a long period of evolving interests and techniques. Through the First World War, and for some years thereafter, our economic statistics related largely to the dead past and were designed primarily for historical or retrospective analysis. We lacked at the end of World War I most of the existing tools we currently have for determining our current position, the index of industrial production, cost-of-living measures, and hourly and weekly earnings. That lack brought into being the Conference Board, the Brookings Institution, the National Bureau of Economic Research, among others.

In the interwar period, and particularly during the great depression, current economic reporting was greatly stimulated. Among other things, national accounting was recognized as an invaluable tool for economic analysis. We added substantially to both the stock of statistical data and methods of economic analysis.

Since World War II, there have been continued improvements in both, together with a new emphasis, the compiling of foreshadowing or anticipatory statistics which reflect decision making by business establishments and consumers and which have already proved so helpful in understanding current and prospective economic trends. I would like to comment further on these foreshadowing statistics at the close of my statement, if time permits.

Moving on to my assignment of general comment on the broad range of economic statistics, I would like to offer two general observations: First, on timing; and second, on seasonal adjustment. As I have indicated, there is considerable interest within business in speeding up the production of business statistics—although business is even more concerned with accuracy—and much of the material submitted by the Council of Economic Advisers and the Bureau of the Budget was devoted to this theme. Certainly, all of us understand the need for timely data by the members of the council, charged as they are with responsibility for charting economic trends and recommending proper economic policy. Personally, however, I sometimes feel that the emphasis on speeding up the output of our statistical agencies is at times exaggerated. I might note in this connection that many Conference Board business executives concurred in this. Is the pace of economic change so rapid that a gain of several days or even a week or two in the publication of statistics is sufficiently important to war-

rant the sacrifice of completeness or accuracy, to say nothing of the expenditure of greater resources? For any specific series, I am as apt as any economist to take exception to my own generalization. But I do suggest this point be weighed carefully in the final decision on how we apportion the limited statistical budget among the many competing demands made upon it. Are we doing a good job with what we have? If not, why not?

The second comment on timing deals with my last two questions: Are we doing a good job with what we have, and if not, why not?

On the basis of our survey this point may be of even greater importance than speeding up publication. That is the infrequency and long delays in getting out some of the essential benchmark data which stem from the Internal Revenue Service, Social Security Administration, and Federal Trade Commission, among others. As benchmarks, many of the figures supplied by these agencies are essential to the accuracy of current economic statistics which are built upon them. These agencies, of course, are not unsympathetic to the problems of the Government and the business economist who wait upon the release of their compilations—indeed in many instances they are themselves the prime users of the economic statistics which are tied in to their benchmarks. They reply that they must give prior attention to the administrative or regulatory functions with which they are charged. Also, they are understandably reluctant to change established procedures and forms merely to provide statistics which are subsidiary to their main responsibilities.

A case in point is Statistics of Income. It would be enormously helpful to us if for the broad item of cost of production the IRS would break out labor costs as distinct from material costs. But that isn't required for statutory purposes.

These hearings, therefore, can play an important role in identifying those areas of income, employment, corporate accounts, et cetera, which are sufficiently important to the Government's program of economic statistics to make their speedy and frequent compilation a matter of higher priority, if not a statutory responsibility of the appropriate agency.

My final comments are on the matter of seasonal adjustment of statistics by the various Government agencies. Current practice in seasonal adjustment is just about as varied as it can get. There is no approach at all toward consistency. And in these days when we wait with bated breath for each day's new crop of figures, seasonal adjustments take on added importance.

In some instances—unemployment or consumer prices—there is no official seasonal adjustment at all, although official interpretation contends that the increase—or decrease—is usual for the month in question. In still other instances, the figures are seasonally adjusted by another Government agency and separately published. The user is defied to find them. Some publish only the seasonal and do not show the unadjusted. Some publish the unadjusted and do not show the seasonal.

And where seasonal adjustments are made, there is often considerable disparity among the seasonal patterns imputed to closely related economic activities.

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Here is a case in point. The Federal Reserve finds a distinct seasonal pattern in the production of transportation equipment, particularly automobiles, but identifies no seasonal in the BLS statistics on employment in the same industry; nor is there to my knowledge any seasonal adjustment of average hours of work in that industry. Since a broad range of economic statistics is subject to seasonal fluctuations which obscure month-to-month trends in the data, the compiling agencies might well undertake the analysis of seasonal patterns and make these available along with the basic data.

In many industries, seasonal adjustments have become more important than at any time since World War II, particularly in the automotive industry. Yet we have had no official description of the seasonal adjustment being applied in this instance.

It would seem that in most instances compiling agencies are in a far better position to do this, being closer to the industry and its prime data, than other agencies in or out of Government.

I would like to close as I began, by expressing my personal appreciation—and, I believe, the appreciation of my business-economist colleagues as a group—and confidence in the general body of Federal economic statistics. Many of the inadequacies that still plague the business economist who uses them continuously or the business executive will be developed in detail in our final report. These inadequacies were also fully covered—rather than glossed over—in the statements of the Bureau of the Budget and the Council of Economic Advisers. My own comments have been designed to direct attention to (*a*) an order of priority, in which accuracy and other factors are given due consideration, under which the improvement of Government statistics might proceed; (*b*) the provision of more frequent benchmark statistics by the administrative and regulatory agencies; (*c*) the more orderly preparation of seasonally adjusted data; and (*d*) intensive review of the more recently developed body of foreshadowing statistics and their adequacy, before embarking on an expansion of such programs.

(The report referred to above is as follows:)

How Government Statistics Can Be Improved

(By Enid Baird Lovell and G. Clark Thompson, Division of Business Practices)

Lack of timeliness is the main defect of Government economic and industry statistics, according to the 117 manufacturing companies participating in this month's survey of business practices. Most Government statistics, they agree, are too late to be of optimum use in day-to-day business operations, and some are so delayed as to be of only historical interest to those who receive them. Nevertheless, most survey participants report substantial use of Government statistical series in connection with their company operations, and many would like to have new and more detailed series made available to them.

EXTENT OF USE

Some few companies state that they make no use of Government statistics whatever, and rely entirely on their trade association for statistics about their own industry, and on newspapers and trade journals for general economic data.

Typical of this small group is the producer of building materials who says, "For the life of us, we cannot put our finger on any of the Government statistical series that are of real use in the conduct of our business."

At the other extreme is a more sizable group, typified by the petroleum executive who says: "There are very few series that we never use; there are many

series that we use regularly, and a somewhat smaller group that we use from time to time."

The series most frequently used by respondents is the BLS consumer prices, or so-called cost-of-living series. BLS wage-and-hour data and Department of Commerce data on exports and imports ranked next in specific mention.

In the case of several companies, these were the only series considered of direct usefulness. One executive, for example, would dispense with all but about 5 percent of the statistics emanating from Washington but states:

"We consider that the monthly index of cost of living is really important and we would be in favor of the Government continuing to compile these data. These indexes should be compiled by the Government because their use requires absolute impartiality, and they would lose their value if compiled by private agencies * * * There are certain other figures which have to be compiled by the Government, and the Government only, by their very nature. These would include export and import data, because these figures can be derived only from port clearances and customs collections."

A chemical manufacturer finds it much more difficult to enumerate and assess the relative value of the many series used in his company's operations:

"Literally hundreds of Government statistical series (including Federal Reserve, International Bank, etc.) are used by us at some time or other, and are therefore useful. On the other hand, no doubt our business would still continue if there were no Government statistics, or a bare minimum thereof. Actually, some series (e. g., Federal Reserve Board production index, exports, imports) might be considered indispensable if no private agency could supply similar material for a fee that would be reasonable for all firms to whom they would be useful. Many series are not useful to us, but may be quite useful to others. I suppose that any statistical series is justified if the result is an increase in the national product, i. e., if its use results in benefits in excess of the cost of producing it."

Relatively few companies attempt to list all the different series they find useful, but most indicate classes of data and types of statistical publications most valuable to them. A substantial number of companies, for example, report regular use of the data published in the Survey of Current Business, including the gross national product and national income statistics; the production indexes and other data in the Federal Reserve Board monthly bulletin; and the selected series published monthly by the Council of Economic Advisers in its report, Economic Indicators.

Census publications, and especially the periodic population, business, and manfacturers censuses, were named by many companies as invaluable sources of "benchmark" data. Department of Agriculture crop reports and price data, and Bureau of Mines reports were rated as highly useful by some industry groups, although of less widespread interest.

Another Government series cited as particularly useful by a number of cooperators is the County Business Patterns series published annually by the Federal Security Agency and the Department of Commerce. An office equipment manufacturer, whose trade association helped in the development of this series, writes:

"A very important statistical release, used not only by our industry but applicable to almost any industry in the producers' or industrial goods field, is the County Business Patterns released. This was a project originally instigated by our committee and tied in with the Bureau of Old-Age and Survivors Insurance (social security) whereby establishments in all classifications are broken out, county by county, giving taxable payroll and establishments breakdown for various classifications by types of business operations although there has been a long interval between these releases; with the addition of Univac equipment in the Bureau of Census there will only be a 7- or 8-month lag after the collection of first quarter information, which is used as the basis for this report."

In addition to industry series and series on general economic trends, businessmen express much interest in long-term "benchmark" data provided by Government census. One chemical company, for example, comments:

"Although the census of manufacturers is taken only at long intervals and is available quite late, it is invaluable in checking and revising privately-gathered statistics. We gripe about the time and expense required to complete our own copy of the questionnaire, but we know that many private series can become distorted if they are not reconciled periodically with the complete census."

Numerous other cooperators concur in emphasizing the indispensability of comprehensive, and relatively frequent, census tabulations to check and guide the current tabulations and estimates of both Government and private groups. The comment of a steel company is indicative of the importance attached to this type of "benchmark" data:

"May we emphasize that without a census of business within the next 12 to 18 months, American industry will be greatly handicapped in its planning for the future. It is practically impossible to forecast the future of any industry, or any company within an industry, unless we can look at past events and trends, and the era since 1947 has been 1 of the most important in this respect in the business history of the United States since the industrial revolution."

Secondhand use of Government data

Many respondents call attention to the many indirect channels by which Government statistics are received and used by their companies. As one company explains it:

"Many people in industry do not realize how much Government statistics they receive secondhand. They rely on private agencies, periodicals, and newspapers for information without realizing how much these private agencies rely in turn on Government statistics."

An industrial machinery manufacturer lists a wide variety of Government statistics used directly in his business, but notes also the myriad figures, too many to enumerate, which are used by economic agencies in general forcasting, and whose forecasts are in turn used by business for both long and short range planning. He concludes: "Although these statistics may not be used directly by a specific company such as ours, they are fundamental to expressions of business opinion upon which a business firm might make many decisions regarding plant expansion, new fields of activity, plant layoffs, and so on.

This pervasive influence of Government statistics on business decisions is observed by another cooperator, who is of the opinion that this knowledge-effect, as he calls it, is one of the best deterrents to major business recession:

"I feel quite certain that the publicity given by the newspapers and forecasting services (based on Government statistics) to the dangers inherent in the inventory accumulation which took place through September of 1953 materially aided in reducing the amount of the buildup and the subsequent contraction."

CONFLICTING DEMANDS

Although virtually unanimous in their desire for more current reporting of Government statistical series, many respondents are very conscious of the practical obstacles involved, and of the conflicting demands for economy, completeness of coverage, accuracy, and specific detail which make for delay in the release of Government statistics to users.

Most companies also recognize that currency is an objective never fully attainable. As one steel company admits "no statistics are ever sufficiently current," or, in the words of another, "sufficiently current for ideal commercial operations."

The prevailing sentiment is summed up in this comment by an electrical manufacturer:

"Everyone would like to get more detailed information, to get it faster, to get complete coverage, etc. These desires are in opposition to one another and all point in the direction of increased cost."

Industry's own role in helping to expedite Government reports is noted by another respondent from the same industry:

"Since the ability of Government bureaus to cut down the lag in time is pretty generally dependent upon the cooperation of business, it is difficult to suggest how the present situation should be corrected. Any steps to improve this service or collect more facts would only result in additional Government expense at a time when public opinion demands cuts in Government expenditures of all kinds."

By and large, those companies that report extensive use of statistics in running their business tend to agree with the respondent who says:

"It is probably only natural to be looking for the reports before they are ready, but generally they are sufficiently current for our use. We realize that it takes some time to tabulate the information and feel that a reasonably good job is being done in an attempt to publish them promptly, but any reduction in the time lag would be appreciated."

TOO MUCH EMPHASIS ON CURRENCY?

Granting that currency is a desirable objective in most instances, two respondents point out that the demand for up-to-the-minute data can be carried too far, and that less frequent reporting is a possible area for economy. A food company representative points out that: "We have gotten into the habit of waiting breathlessly for the latest weekly or monthly figures, but when we see them we are likely to say, 'Oh, well, 1 week or month is not so significant anyhow.'" A petroleum company executive goes even further in suggesting that some statistics are reported too frequently: "Our purchasing department, for example, has received bids tying contract prices to parts of the Wholesale Price Index, which would seem to invite price instability. The minor fluctuations of the Consumer Price Index, in a period of relative price stability, also seem to receive more publicity than their nature or their magnitude would warrant."

EXPEDITING RELEASE OF DATA

Constructive suggestions for speeding up the collection and dissemination of Government statistics fall under four general headings:

More extensive use of sampling and of interim estimates.

More flash releases of major findings before final tabulations are completed.

More funneling of data through newspapers, trade journals, and trade associations in advance of official publication in printed reports.

Improvement in the mechanical processes of compilation, publication and distribution of data to users.

Several companies suggest that sampling techniques could be used advantageously to speed up the availability of certain series where knowledge of trends is more important than actual final figures. But others object strongly to the use of sampling procedures and estimates.

Thus the opinion that, "Interim monthly estimates of data normally reported on a quarterly basis would be helpful," is countered by the opinion that, "it is desirable to have information sooner than it is now reported; but not if estimates have to be made."

Considerable support is voiced for flash preliminary reports of major findings through releases to the newspapers, trade journals, and trade associations. More use of mimeographed releases, and more activity on the part of trade associations in reproducing and disseminating relevant data to members are also advocated.

The services performed by daily and weekly trade publications, and by private commercial services, in summarizing and releasing Government data that are collected on a current basis but published at less frequent intervals, are mentioned favorably by various reporting companies.

One respondent criticizes the Government practice of delaying release of unadjusted indexes until after seasonally adjusted series have been compiled and issued.

Increased use of electric computing machines and other tabulating equipment as a means of expediting compilation and release of data is recommended by several cooperators—one of whom would follow up with "teletypewriter systems for the rapid transmission of statistics to users."

Various reporting companies observe that delays in the dissemination of weekly and monthly statistical series occur in the reproduction and distribution of finished reports, rather than in the collection and processing of the data. And the cooperator who wishes "it were possible on payment of a special fee to have reports mailed first class instead of third class" is joined by others who would be willing to pay more for speedier transmission of final reports, or advance release of component series in which they have a particular interest.

Relatively few companies mention the use of existing facilities for special-fee service. One chemical manufacturer, however, reports his company has found it possible to obtain various types of data by telephone from Government departments under a contract-fee system, including monthly export and import figures earlier than their actual release.

ELIMINATION OF DUPLICATION

Elimination of duplication and better coordination of statistical series are other forms of needed improvement stressed by reporting companies. Most comments refer to overlapping or lack of consistency in Government series them-

selves, but others are concerned with more effective integration of both Government and private series as a means of maximizing the usefulness of available data.

Respondents from many of the key industries report successful efforts of trade association committees in effecting improvement in the Government statistical data for their industries, so that the series conform in classification and detail to the needs of the industry, and complement the trade associations' own series. Prior Government consultation with industry representatives on proposed new series or modifications of existing series is also suggested.

Other suggestions advanced for streamlining the collection and processing of data, or otherwise improving the usefulness of Government statistical series include the following:

Establishment of a centralized clearing agency such as exists in Canada to coordinate the Government statistical activities.

Periodic publication of a listed index of all statistical series telling exactly where they are available.

Reexamination of seasonal adjustment factors, and careful reappraisal of those based on selected prewar or postwar years.

More extensive use of scientific sampling.

More care in definition of data to have them more nearly pure.

Less estimation and imputation of gaps in data.

More qualification of inadequacies in data.

Periodic revision of reporting forms so that classifications and definitions keep pace with the development and introduction of new or altered products.

Provision, upon request and on a confidential basis forbidding public disclosure, of unpublished component series needed for special research projects.

Brief description of sample designs, estimating procedures, and magnitude of standard error of estimate where sampling techniques are used.

Less emphasis on dollar value series, more on series based on physical volume of output and employment.

SPECIALIZED INDUSTRY STATISTICS

That Government and industry have reciprocal responsibilities in providing economic and industrial statistics, and that the best job can be done by coordinating and integrating their statistical activities is generally agreed by survey participants. But they express very diverse opinions on the relative value of trade association and Government statistics for their own industry, and on the proper division of responsibility for collecting and disseminating specialized industry data.

A joint responsibility

The need for better liaison and cooperation to eliminate duplication of effort, and to improve the comparability and usefulness of industry data is widely acknowledged by companies cooperating in the survey. They agree that both Government and trade association series are needed to obtain the complete picture necessary to guide the short- and long-range decisions of company executives.

A steel company representative puts it this way:

"There are areas in which it is preferable for a trade association to compile the data. A typical example of this is that of the statistics furnished by the American Iron & Steel Institute. On the other hand, there are areas in which only the Government is able to do a comprehensive job, particularly where there is not strong trade association or where the membership in the trade association is not sufficiently all embracing to represent all segments of an industry. * * * It should be a question of who can do the best job rather than who is to pay for the cost."

Pro Trade Association

Those companies that want trade associations to take the dominant role in providing specialized industry statistics and the Government to confine its efforts to general economic series of broad public interest, advance arguments such as the following:

1. Trade associations can collect and disseminate the data more quickly and cheaply.

2. They are able and willing to collect more detailed data on a more frequent basis.

3. They can secure better cooperation of industry members.
4. They are able to collect, compile, and distribute figures in a form more closely adapted to industry needs.
5. They can police the completeness and accuracy of data better.
6. Industry ought to be self-sufficient and take care of its own statistical needs.

The following comments are representatives of views expressed by pro trade association respondents:

"We feel that only strong trade associations can compile accurate data from within their industries and that there is a real need for such groups, both to police their industries and to make necessary statistics available. They can probably do both jobs better than the Government."—Mining.

* * * * * * *

"When done privately the programs are more flexible, their scope can be more easily adjusted to the current needs, and the data are available more promptly. The periodic business censuses which only the Government can take are needed to furnish occasional overall check data."—Nonferrous metals.

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"We wish to report that we do not use any of the Government statistical series. Our trade association furnishes us with the desired information—which we estimate is gotten quicker and more accurately. When we use the trade association reports, we feel that we have contributed to them, and we know that other members of the industry have also contributed on the same basis, and we feel that they are more reliable, even though they may not be. Therefore, as far as we are concerned, all statistics provided to the trade association are important, and the Government reports are nothing but a repetition of ours. We appreciate the fact that there are the labor statistical series and price series—which are available perhaps only from the Government bureaus and probably should be retained—but for the most part we strongly believe in our trade association and specialized industry reports."—Hardware.

Pro Government

Companies that feel the Government should continue to collect industrial statistics on at least the present scale offer such reasons as these:

1. It is a basic Government responsibility to collect and publish data on economic and industrial activity.
2. Government series are more apt to be unbiased.
3. The confidential status of data is better insured under Government collection.
4. Government series are available to all, whereas trade associations often restrict access distribution.
5. Many trade associations lack qualified statistical personnel.
6. Government collection of data is not hampered by the possibility of antitrust charges.
7. Only the Government can secure adequate coverage in industries composed of many small units.
8. Government series provide continually and consistency of series and can be combined in aggregate or index series.

Typical comments from respondents favoring Government collection of industry statistics are these:

"Our general feeling is that industries, trade associations, and individual companies cannot collect adequate statistics for their own industries for four main reasons:

"(*a*) Adequate collection of industry statistics is potentially hampered by the chance of running afoul of the antitrust laws. (*b*) Competitive considerations raise the spector of violated confidentiality. (*c*) Varying and changing coverage leads to questionable reliability. (*d*) Data gathered are apt to be special-purpose statistics and not adaptable to integration into necessary general-purpose patterns. Our feeling is that more adequate statistics can be assembled at less cost and more reliability by Government, with the cooperation of industry."—Electrical manufacturing.

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"No trade association covers a broad enough area to publish any consolidated information in a way which would be satisfying to business needs. Therefore,

there is a point where private industry must turn the work over to a broad, overall organization such as the United States Government."

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"From experience in our industry, I would say the Government is in better position to make a far-flung effort, together with the authority behind such requests in order to perform a better job than trade associations. In any case, where a segment of an industry is under a Federal consent decree there is a reluctance to supply any information on a pooled basis unless it is under the protective umbrella of a Government agency."

SHARING THE COSTS

While most of the reporting companies approve the idea of shifting to industry all or part of the costs of collecting specialized industry statistics of interest to only a small segment of the business community, there is no real consensus on where the line should be drawn as between specialized and other industrial statistics, and how the costs should be allocated.

As one executive points out, is is easy to accept the general principle that a specialized series of interest to only a small group should be collected, or at least paid for, by those who will benefit from them. But he, along with other respondents, foresees major practical difficulties in any attempted application of the principle. Who is to decide the extent of interest in any particular series? How, and by whom can costs be equitably allocated as between Government, industry, and individual company interests?

An oil company executive suggests that only a very minor part of all industry statistics would fall within such a specialized category, inasmuch as nearly all series are useful to industries other than the one immediately involved, and also to the Government itself.

An automobile manufacturer elaborates on this point as follows:

"Much of what may be called specialized industry statistics is widely used outside a particular industry. For example, the Federal Government itself makes use of such significant industry indicators as production of iron, steel, coal, autos, electricity, oil, etc. Financial and credit institutions, university business research bureaus, and others utilize the data for their analyses. Only in cases where the specific industry figures are not used to compile general economic series and are of little or no importance to Government and to individuals or businesses outside the industry would we favor that the industry pay for the cost of compilation. But industry, trade associations, and companies should cooperate in assembling data."

Several companies note that the Government has a basic responsibility to the economy to collect and distribute statistics on industrial activity and that industry members already contribute substantial support for this service in the form of taxes and the costs entailed in compiling and reporting data on their own companies. Hence, it is argued, they should not be called upon to make direct payment for statistical services except in those special instances where a small group has requested collections or tabulations of data that are of no real significance to any other group or to the Government itself.

The president of an office equipment company expresses his opinion as follows:

"Certainly, in cases of extremely specialized and relatively small industries, the public interest is not served by expenditures for collecting and publishing these data. In such cases, it would certainly be possible for the industry, either collectively through trade associations or individually, to pay part of the costs. As a suggestion, this portion might include publication and tabulation costs only, or it might also include costs incidental to collection if not applicable to other general data or use.

"In the case of larger industries, there are probably other factors to consider—the use of the data by economists, research groups, or sections of other industries and the mobilization planners of the Federal Government. Here the costs involved might be borne to a greater extent by industry in the form of higher prices for the published data. However, in this case, total subsidization by the industries directly involved would be unfair."

Various respondents call attention to the existing Facts for Industry series which are collected on a contract basis for special industry groups. They suggest that other types of cooperative arrangements could be worked out for sharing the costs of special tabulations, or additional series of mutual value which are not feasible with the funds now available to the Government agencies' other special statistical projects.

One company proposes, for example, "that the Government make available, at cost, special tabulations of product, geographical, or other subdivisions of available data for limited or special interest purposes." Another suggests that "the Government should go further in exploring the possibility of gathering detailed industry statistics which could be supplied if a fee were charged to interested concerns."

WANTED AND UNWANTED SERIES

Cooperators submit many proposals for improving presently available Government statistics, including the addition of several new economic indicator series, as well as expansion and modification of existing industry series.

Proposed new series

More and better data on end-use consumption of products would be welcomed, say several companies. A chemical manufacturer writes as follows on this point: "Statistics which would be extremely helpful, but which are generally lacking, are figures on the end-use consumption of chemicals. Even if the figures were only reported once every 5 years they would be helpful and would offer a clue in allocating outlets. That, in my opinion, is the greatest deficiency in the valuable statistics that are being published by the Government."

Resumption of the interindustry relations (input-output) statistics, that have been curtailed for economy reasons, was urged by a number of companies. A machinery manufacturer says:

"A really worthwhile addition to the battery of currently reported statistics would be reasonably frequent reports concerning interindustry relations, such as that made by the Department of Labor for the year 1947. This would have immediate application for both Government and industry."

A series that would measure regional activity (e. g., for five western States), is advocated by a petroleum company. Various executives suggest also that more geographic breakdowns of existing economic series are desirable.

"The only urgent need for improved service at the moment is the need for a more current new orders series," writes one food executive. Other companies also see a need for more frequent and more reliable data on new orders and on inventories.

New general economic series proposed by another cooperator includes: "A cost-of-distribution series on some consistent basis, a monthly series on disposable personal income; and a series showing private nonfarm construction expenditures for modernization and repair of homes."

Publication of more of the series used in compiling GNP data is requested by an industrial machinery executive, who would like (*a*) "All the series used in the constant dollar deflation of gross national product components" including the deflators of nonresidential construction, building and net foreign investment which are not now published, and (*b*) "personal income, savings, and debt statistics reported on a comparable basis according to income size groups, by sources of income, form of savings, and type of debt."

Another executive from the same industry suggests that "A series of age characteristics of producers' equipment, scrappage of producers' equipment, and capacity usage of producers' equipment would be extremely valuable to the capital goods industry."

Series to drop

Specific suggestions for abandonment of existing series are few in number, although many companies feel that substantial reductions are possible in the overall volume of data collected, and that all series should be critically reviewed and evaluated as to potential usefulness, actual usage, and duplication of privately collected statistics.

Several cooperators emphasized their unwillingness to propose the dropping of series which are of no value to them, because the same series may be of great importance to other users.

The need for the indexes of stock prices compiled by the Securities and Exchange Commission is questioned by one chemical company, in view of the fact that "the Dow Jones and Standard Statistics are both accurately compiled and widely disseminated at almost no cost." Conceding that the latter two may have their faults for specific purposes, he doubts whether a third adds much to the common knowledge.

The releases of the Federal Trade Commission covering operating percentages for certain industries are called unreliable and misleading by one respondent,

and another finds the quarterly financial reports of the Commission of no value.

In a few instances, companies suggest discontinuance of industry data collected in the Facts for Industry series, on the grounds that practically all the information is available from trade association sources.

Suspension of certain economic indicator series, pending correction of serious defects of coverage, compilation, or concepts, is proposed in several instances. These comments are included below, with other criticism of the particular series in question.

CRITICISM OF EXISTING SERIES

Critical comment on existing Government statistics relates primarily to inadequacies of coverage, classification detail, or timeliness. The reliability and accuracy of certain composite series were also questioned by some cooperators, who offered various suggestions for revision and improvement.

Data on employment and unemployment, on productivity and on new orders and inventory were the subject of strong adverse comment, as were the construction series. Revision of the savings and investment components of the gross national product and national income statistics was also advocated by several survey participants.

Critical comments and suggestions for improvement made by respondents are summarized below.

Productivity data

Probably the most severe criticism was directed at the productivity data collected by the Bureau of Labor Statistics. Comments such as the following, emanating from various types of industry, indicate wide dissatisfaction with the data:

"Data regarding productivity represent perhaps the most hopeless morass of all Government statistics. This area needs intensive and immediate research, and discontinuance of publication until reasonably reliable data can be forthcoming."—Electrical appliances and supplies.

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"The BLS apparently intends to introduce a series measuring productivity. We shall attempt to reserve judgment until the results are made known, but we suspect that the matter is not susceptible of numerical measures."—Petroleum.

"In the realm of unsatisfactory statistics, believe a leading place should be given to the BLS indexes of productivity, especially those derived from secondary sources. The problems of definition of output, coverage, changes in auxiliary operations (such as making instead of buying supplies) each can contribute errors greater than the magnitude the index is supposed to measure."—Food.

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"In this area of automation, where there is less and less correlation between number of employees and other measures of productivity of a particular plant or group of plants, value added by manufacturer would be a better measure to use. Companies which sell equipment, supplies and raw materials are interested in capital investment or productivity. This is increasingly better measured by value added by manufacture, rather than number of employees."—Industrial machinery.

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"One of the problems is the solicitation by the Government of various reports for which industry is skeptical as to the ultimate use. We have been requested from time to time to furnish labor report information, which we feel quite sure is just the type of information that is improperly used to show an increase in 'productivity' due to technological and equipment improvement changes."—Foundry.

Employment, wages and hours

The desirability of coordinating and improving employment data was stressed by various respondents. An industrial machinery manufacturer points up existing confusion in this area:

"Employment data on a national level is currently collected and reported by four separate Government and private agencies (U. S. Department of Commerce, U. S. Department of Labor, Federal Security Administration, and the Board of Governors of the Federal Reserve System). In addition, State and

local governments collect and report employment data that cannot be used at the national level because the data are neither universally collected nor comparable amongst the various collecting agencies. Streamlining this maze of apparent duplication would unquestionably result in dropping some series as well as introducing confidence in, and therefore encouraging more widespread application of the series retained."—Industrial machinery.

Wage and hour data are also deemed inadequate by several survey companies:

"We have little or no use for figures pertaining to labor rates, hours worked, etc. Experience shows that national averages are misleading as labor rates are actually determined by area. The average area figures may be of interest to companies with plants located in various regions but they are of little value to manufacturers who have one-plant operations."—Industrial machinery.

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"The various series on employment and hours are not easily comparable. A common survey week would facilitate comparisons and cross-checking. Area or regional summaries of the labor force and its components would improve the analysis of changing economic conditions. In addition, we would like to see (1) seasonal adjustments of Census employment and unemployment totals, (2) inclusion of BES benefit exhaustion data in the new joint release on employment, (3) a separate breakout of children under 14 in the AMS farm employment series and (4) serious consideration given to the possibility of publishing man-hour and average weekly hour series based on hours worked in addition to the present BLS series based on hours paid for."—Automobile and equipment.

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"Because of the innumerable complexities involved in general wage comparisons, we find it most useful to compare average straight-time hourly base rates. The BLS method of computing straight-time average earnings (adjusting gross hourly earnings only for time and one-half payments for hours worked in excess of forty per week) leaves much to be desired in establishing valid comparisons."—Petroleum.

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"Figures in the petroleum industry relating to employment and earnings are limited in their value by the method of reporting. Thus BLS statistics on hours and earnings shows an index for products of petroleum and coal. It seems to us that the working conditions in petroleum-refining and in coal products are dissimilar and that to consider the two in aggregate unnecessarily limits the usefulness of the index."—Petroleum.

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"The wage data would be somewhat more helpful if the various city reports covered a similar period for all cities, rather than the year-round spread now being used."—Industrial machinery.

Sales, inventories, new orders

Complaints against the Department of Commerce data on sales, inventories, and new orders are numerous. One electrical manufacturer says flatly that inventory, sales, and orders data by industries should be dropped until such time as clear reporting can be accomplished. Other comments include the following:

"We would like to, but do not, use the series on manufacturers' new orders and manufacturers' unfilled orders, which would prove very useful indices were they collected on a more meaningful basis. It is our understanding that much of the data is on a mill basis. Inventory buildup or inventory reductions of branch warehouse stocks or consigned stocks affect these figures materially. It would be good to have these data on a uniform and realistic basis."—Steel.

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"The outstanding example [of an unsatisfactory series] has to do with the monthly index series on manufacturers' sales, inventories, new orders, and unfilled orders prepared and released by the Business Structures Division of the Department of Commerce. After a very careful review we have found many inconsistencies, outright errors and misleading factors involved in this series * * * It should either be discontinued entirely or prepared by the Bureau of the Census, employing sounder procedures than those presently being used."—Electrical machinery.

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"We have never felt sure of the stock-sales ratios given in the wholesale trade report. Those figures would be more useful to us if they were reported in terms of inventory turnover, a concept that is more familiar to us."—Electrical machinery.

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Construction statistics

Criticism of construction statistics comes from many industry groups:

"Construction data by Department of Commerce are not reliable. This series, as it applies to certain segments of total construction volume, could be very helpful to us if we had more confidence in them."—Office equipment.

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"We regularly use the Department of Commerce series on construction work—put in place, but frankly have lately grown very apprehensive about them, as we understand these figures are so full of estimates and inadequate data as to be questionable. * * * It is just possible that if they cannot improve these statistics they ought to be discontinued."—Industrial machinery.

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"Number of nonfarm housing starts published monthly are formula figures not available by areas, and there is no basis for determining accuracy. Residential building permits cover incorporated areas only."—Heating and plumbing.

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"Statistics on construction—particularly maintenance and repair—should be expanded and improved."—Steel.

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"We feel that building statistics could be reported most efficiently by private agencies, such as the F. W. Dodge Corp."—Heating and plumbing.

Cost of living and other price series

Although cost of living and other price series were mentioned frequently by survey participants, critical comments were relatively few:

"The Consumer Price Index includes many more commodities and probably covers many more locations than necessary for accuracy."—Food.

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"There is a weighting bias in composite prices indexes. For example, coffee consumption is down due to increased prices, but the weighting system fails to take account of this."—Food.

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"Would like a breakdown of meats, poultry, and fish index, inasmuch as trends in the prices of these commodities can be quite different."—Food.

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"Cost-of-living data give changes within each city but no market basket comparison between cities which we would like to compare."—Industrial machinery.

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"Metals and metal products index is based entirely on published base quotations rather than actual prices being paid."—Industrial machinery.

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Export-import statistics

"The sampling techniques recently instituted in the preparation of the summary data on export statistics have greatly damaged the accuracy of these data. Since it has been found to create many inconsistencies in the summary data, the sampling system should be abolished and complete enumeration be resumed."—Electrical machinery.

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"Imports of merchandise for consumption, FT 110 comes out monthly about 4 months late. This is so slow that only the annual edition is of real value."—Petroleum.

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"Some series are viewed with a jaundiced eye because we are aware of their inadequacies. A specific example is the export data presented in the Bureau of the Census Report No. FT 410, where new and used machinery are reported

together, as are fully automatic and manually operated machines. Data of this character are of nebulous value and are suited almost exclusively to disclosing pronounced trends. If these data were improved, they would be used in forecasting foreign sales and establishing foreign sales quotas."—Industrial machinery.

Gross national product and national income

Comparatively few participants in the survey made specific criticisms of GNP and national income statistics, although several expressed a desire for more explanation of the coverage and construction of the composite series, and more extensive annotation to "spell out more clearly the limitations and the pitfalls of using specific components in business forecasting."

One electrical manufacturer is of the opinion that the gross national product statistics should be dropped until methodology can be improved and serious gaps of missing data closed.

An automobile manufacturer directs attention to three problem areas, in the following comments:

"1. The concepts of disposable personal income and of personal savings need to be re-examined. There appear to be a number of 'fixed or semifixed' commitments of individuals and unincorporated business which are not included in personal consumption expenditures, but are reflected in disposable income and personal savings. Primary examples of various fixed commitments are (*a*) certain debt retirement, such as home mortgage debt and consumer installment credit, and (*b*) certain insurance and pension premiums.

"Obviously, the lumping of such varied items as (*a*) net debt retirement, (*b*) increase in insurance and pension reserves, (*c*) net investment by individuals and unincorporated business, and (*d*) change in liquid asset holdings by individuals and unincorporated business lead to a confused interpretation of personal savings. We would urge a quarterly breakout of the above items if possible. This would tend to minimize flagrant and meaningless uses of the rate of personal savings.

"Another possible approach would be that of subtracting out the relatively fixed items from the present disposable income, resulting in a more realistic disposable income figure.

"2. The preliminary figure for the change in business inventories is usually highly questionable, especially on a seasonally adjusted basis. The first revised figure comes out about 5 months after the end of the quarter. By that time the real inventory situation may have changed drastically.

"3. The services component of personal consumption expenditures includes a sizable amount called imputed rent, which is shown only annually. It would be helpful if imputed rent estimates, or at least that part not involving cash outlays would be broken out in the quarterly data. This would enable analysts to evaluate an actual economic situation more correctly. If possible the same adjustment should be made of other imputed noncash expenditures or income, e. g., that portion of agricultural income and personal incomes coming from farm products used in the household."

Individual industry series

Criticism of statistical series for individual industries focused most often on the adequacy of classification detail to fit specific needs of reporting companies. Lack of currency of the data, and duplication with trade association data were other sources of criticism. The following examples are indicative of the kinds of deficiencies noted.

"We would like to see a better breakdown in the plastics raw material field, so that the production of individual plastics, such as vinyls, acetates, polyethylene, would be set out individually rather than lumped.—Food.

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"Paint, varnish, and lacquer sales figures are not helpful. Categories are much too broad and are stated in dollar figures only; furthermore, there are apparent duplications in reporting between manufacturers of varnish and manufacturers of paints utilizing varnish as a vehicle. We think that figures should be given in terms of gallons, by type of paint, and duplications should be eliminated."—Chemicals.

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"Reports presenting total chemical production, such as the United States Tariff Commission's annual report, have a great deal of duplication in the totals. This is because chemicals produced and reported by one company are the raw materials for another chemical company, and each company's production is reported in the totals."—Petroleum.

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"Industry figures as presently compiled are unsatisfactory because they are too general. For example, figures on sales of office equipment include adding machines and typewriters as well as desks, files, and tables. Individual items lose their identity and there is no basis for a really useful comparison."—Office equipment.

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"There are publications of data on the steel industry that we do not use because of certain deficiencies. These reports may use unsatisfactory units for measuring activity (show dollar sales rather than tonnage); use too broad or meaningless classifications; do not show sufficient detail (geographic, product, etc.) or have various other limitations."—Steel.

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"It would seem to me desirable for the Government to use standard designations for various groups. For instance—in the employment and payrolls report, we have a classification of iron and steel foundries; in the hours and earnings industry report we have a classification of 'gray-iron foundries'; the release 'Employment hours and earnings' has 'primary metals industries' as the designation under which foundries fall; in the quarterly 'Injury frequency rate in manufacturing' report, we find the classification of 'gray iron and malleable foundries.' It seems to me that combined groupings serve very little real purpose, and all reports should have specific and uniform groupings."—Foundries.

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"Statistics indicating the trend of sales or of purchases of replacement automotive parts would be most valuable. The Government figures published until recently, which were derived from excise tax figures, were not of direct value to us because they lumped together parts and accessories. I believe the entire automotive industry would benefit greatly if some statistics could be gathered to indicate production, replacement sales, or purchase of auotomotive parts, if separate and distinct from items commonly called accessories."—Automotive equipment.

All of these suggestions and criticisms are aptly summed up by the executive who wrote: "One fundamental point in this whole problem, which it seems to us should be kept clear, is the distinction between statistics per se and substantive matters. The statisticians have what approaches a science, but that science, when transferred to a particular field, is often in disrepute because of inadequate substantive and definitional manipulations."

Mr. GAINSBRUGH. Mr. Chairman, if I have a few more minutes, I would like to comment on my last point; or would you prefer I wait until later, on the point of foreshadowing statistics and their adequacy?

Representative TALLE. Dr. Gainsbrugh, the 15 minutes are just up. The committee will appreciate it if you will reserve your other comments for later presentation.

The Chair would like to state to those in the audience who came in late that our program today is devoted to testimony given by specialists in the fields, persons who make use of statistics, in Government as well as private business. The users of statistics are making their statements today.

We turn now to the second paper, by Dr. Boris Shishkin, research director of the American Federation of Labor, which I understand is to be presented by a member of his staff.

STATEMENT OF BORIS SHISHKIN, DIRECTOR OF RESEARCH, AMERICAN FEDERATION OF LABOR, PRESENTED BY BERT SEIDMAN, STAFF ECONOMIST, AMERICAN FEDERATION OF LABOR

Mr. SEIDMAN. Mr. Chairman and members of the committee, Mr. Shishkin is ill and will be unable to be present this morning. He was looking forward to his participation in this hearing, and I know he is very regretful that he is unable to be here. He has asked me to present his views.

Representative TALLE. Will you identify yourself?

Mr. SEIDMAN. My name is Bert Seidman and I am a staff economist for the American Federation of Labor.

Representative TALLE. Will you proceed?

Mr. SEIDMAN. The increasing deficiencies in the economic-statistics programs of the Federal Government are a matter of first importance to the welfare of the Nation. The Joint Committee on the Economic Report is to be commended, therefore, for having undertaken an examination of this vital problem.

The statistical tools for economic analysis by our Government and private organizations and individuals are essential for determining the Nation's economic course. Their maintenance and improvement requires the fullest consideration and support.

The time is long since past when statistics were of concern only to technical statisticians. With the increased complexities of modern economic life, statistics are needed to describe what is happening in our vast economy and as storm signals to warn us of what is likely to occur. The increased importance of statistics cannot be doubted when we know that the movements of some statistical series are watched closely by millions of people whose fortunes may even depend on relatively slight changes in these indicators. In a period of rising prices, the Consumers' Price Index made the headlines. Now, the unemployment series receives the major attention. Perhaps in time it may be indexes of productivity which will be closely studied by millions.

Labor has a direct concern in the adequacy of these statistical programs. To be sure, labor is most interested in those statistical series which relate to employment and unemployment, wages, collective-bargaining developments, and consumer prices. But, increasingly, labor has had to be concerned as well with statistics on production, productivity, residential and nonresidential construction, profits, sales, inventories, and many other basic economic indicators.

It is a paradox that despite the growing acceptance and recognition that statistics are essential tools for economic growth, there has been a serious attrition of some of the most important statistical programs of the Federal Government. This weakening of the Government's statistical activities has taken a serious toll by depriving both the Government and private organizations of the tools needed for measuring and appraising fundamental economic developments and for facilitating economic expansion.

The statistical programs of the Federal Government do not serve some groups in the population at the expense of others. On the contrary, they are increasingly required by businessmen and workers as well as by students and technicians. They cannot be replaced by

private efforts or private resources. We must look to the Federal Government for basic statistical information because only the Government has the facilities and resources to carry on successfully the essential statistical programs.

The cost of maintaining adequate statistical programs geared to the needs of the economy is almost infinitesimal when compared with either the total cost of Government or economic value of the data derived. Yet, year by year, limitations on appropriations have forced cutbacks in essential statistical programs. Effective economic analysis has been severely handicapped. In labor-management relations, the deterioration of the Government statistical programs has hindered the development of more informed and harmonious bargaining relationships.

The failure to provide necessary funds for the Government's statistical work has had a number of unfortunate results. In some cases it has meant that essential information has been altogether lacking. For example, there have been no figures published since 1943 on the relation of labor cost to total production cost in different industries. In some cases, some data have been made available, but they have been either inadequate or, by the time of publication, out of date. This has been true, for example, of much of the census material.

Another byproduct of inadequate appropriations for Government statistical programs has been the increasing tendency of Federal statistical agencies to resort to mail questionnaires even in instances when it is conceded that only field investigations can yield statistics of unquestioned validity. Still another harmful result of the attrition of the Government statistical programs has been the increasing tendency on the part of the Government statistical agencies to seek private financing of essential Government statistical programs and to make special charges for statistical information. These are only some of the dangerous consequences of the lack of even the minimum funds needed for maintaining the Government statistical programs at an adequate level.

In order not to be misunderstood, let me make one thing clear. Labor has complete faith in the integrity of the statisticians who are responsible for the data collected and published by the Government and in the statistical series which they produce. While we may criticize some aspects of these programs, we do not doubt their basic validity. Nevertheless, we must recognize that the cutbacks and shortcuts which have been forced on the Government statistical agencies by lack of sufficient funds have inevitable detrimental effects on the quality of the data published. Once the soundness of statistics is questioned, they begin to lose their usefulness as tools for economic analysis.

I urge most strongly that this trend toward reduction of appropriations for statistical agencies be reversed. The Congress should realize that it is false economy to deprive the Nation of essential statistical tools. In the long run, the cost to the Nation of such restrictions on essential statistical information is far greater than the relatively few dollars that may be saved in annual appropriations.

Even if the statistical programs are adequate in scope and technical quality, it is most important that they be organized so that they

are of maximum value for purposes of economic analysis. This means that wherever possible, the definitions used in statistical series should conform with meaningful economic concepts. I recognize that this is not always possible because of limitations in collection and tabulation of the primary data. But the objective of using definitions that do not conflict with economic concepts should be sought wherever feasible. I have in mind, for example, some severe shortcomings of the definition of unemployment on which I will comment in detail later.

Before turning to comments on specific statistical series, I want to direct a few remarks to the organization of statistical operations of the Federal Government. We firmly believe that statistical programs can best perform their valuable function when they can be closely related to operating programs.

For that reason we, along with the officials of the Federal agencies who testified yesterday, would reject the suggestion for a central statistical agency. We think that the disadvantages of such a change would far outweigh its advantages, and particularly that it might unnecessarily pave the way for unscrupulous administrators to impair the integrity of the statistical data. We don't say that would happen, but we think it would be more possible in the event of such centralization of the Government statistical activities.

The Office of Statistical Standards, which now has the responsibility for coordinating the programs of the various Federal statistical agencies, is, in the main, doing a good job of appraising and dovetailing the Government's statistical activity. Some improvement might be achieved by broadening and improving consultation among the governmental statistical agencies, and of these agencies with principal outside groups which use the Federal statistical data.

In this connection, I might state that the trade union research directors, who are members of a labor research advisory committee to the Bureau of Labor Statistics, and a similar advisory committee to the Office of Statistical Standards, have felt that these arrangements have been very helpful, and we are very appreciative of the opportunity we have had for a close relationship with these Government statistical agencies.

I turn now to specific statistical series.

The first major series is employment and unemployment.

Labor has always had a vital interest in statistics of employment and unemployment. In fact, until the Federal Government began to publish official statistics on unemployment, the American Federation of Labor compiled its own figures on national unemployment.

In connection with these figures we are, of course, concerned with four series, those of the Bureau of the Census on employment and unemployment, the Bureau of Employment Security Statistics on unemployment insurance claimants, the Bureau of Labor Statistics on non-farm employment and the Agricultural Marketing Service of the Department of Agriculture on farm employment.

1. Our first recommendation is that the definition of "employment" and "unemployment" used by the Bureau of the Census in the Monthly Report on the Labor Force should be revised so that all individuals without work during the survey week for economic reasons are classified as unemployed. This report should be expanded to provide infor-

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mation on the characteristics of the unemployed, including occupation and industry attachment, more detailed information on the category "with a job but not at work," regional and locality data, gross changes in the labor force and more frequent information on part-time employment, particularly during periods of high employment.

2. We would urge that the data on insured unemployment of the Bureau of Employment Security should include current information on the number of persons who have exhausted unemployment insurance claims. It should also provide data on the most recent industry attachment of those receiving unemployment insurance as an indication of the "trouble spots" in our economy.

3. The Bureau of Labor Statistics nonfarm employment data should be expanded to provide more information by locality, especially for nonmanufacturing industries; and a more detailed breakdown of industries—so-called four-digit industries—for both the manufacturing and nonmanufacturing sector of the economy. The labor turnover data of the Bureau of Labor Statistics should be improved by developing a more accurate sample which would permit a more detailed industrial breakdown and make available regional information which is now lacking.

We question the usefulness of the farm employment series of the Department of Agriculture because it is based on a mail questionnaire which we think is of doubtful validity.

The second major area in which we are interested is wage statistics, which are a most important ingredient for the informational background for collective bargaining. Here we need information specifically on job wage rates. We are therefore very much concerned because of the Bureau of Labor Statistics has been forced by reduction in its appropriations to curtail its program of industry occupation wage data and, where it has been making these surveys, has been forced to resort to mail questionnaires and other questionable data collection methods.

We therefore urge that the industry occupation wage studies of the Bureau of Labor Statistics be expanded and that the Bureau be allotted sufficient funds to resume field investigations in place of mail questionnaires.

We would also like to have information on labor costs and we therefore urge that financial information now published jointly by the Federal Trade Commission and the Securities and Exchange Commission be expanded to provide information on direct labor costs as well as other specific costs of production.

We are particularly interested in obtaining collective bargaining statistics. We want information on developments and practices in the field of collective bargaining. For this purpose improvement and expansion of the Bureau of Labor Statistics file of collective bargaining agreements is necessary in order to provide the raw material essential for analysis of collective bargaining developments. We also urge that the Bureau's analytical work in this field be expanded.

On the subject of productivity, we are particularly concerned that there is not now available an index of national productivity for the entire economy. We are gratified that the staff memorandum on productivity of the Bureau of the Budget makes this its first recommenda-

tion and urge that funds be appropriated for the Bureau of Labor Statistics to undertake this work.

We would also urge that the studies by the Bureau of Labor Statistics of unit man-hour requirements on products and subproducts in selected industries be resumed. These are the type of industry productivity data which are most useful as indicators of the demand for labor, not only in manufacturing but also in construction. In the past, when it had the funds to do this job, the Bureau of Labor Statistics has made such computations for construction.

On prices and cost of living, we feel this is a particularly good time because the index is relatively stable to engage in the basic research necessary for the improvement of the data. We therefore urge that this work be carried on at this time and that also funds be made available to the Bureau of Labor Statistics to permit revision of the Consumer Price Index no less often than once every 5 years.

In connection with that index, we think that it would be most useful if in addition to the index now being published, an index were published, perhaps at less frequent intervals, including income taxes. This would permit more precise measurement of the changes in the purchasing power of workers' wages.

We are also interested in getting better data on consumer expenditures and family budgets, on industrial injuries, and on the distribution of income and savings of individuals and their families. These data are available from the Survey of Consumer Finances of the Federal Reserve Board but not in sufficient detail. Because of the small sample used, it is questionable whether these figures are entirely accurate.

We are also very much interested in getting better figures on housing and construction. In particular, we would like to get information on the characteristics of new housing and characteristics of buyers and tenants of new housing. We would also like to have a sample census of housing taken by the Bureau of the Census which would provide, at intervals perhaps not less often than every 2 years, the data which are now being provided in the decennial census. We also would like to see the decennial census of housing provide certain information on the characteristics of the available housing supply which it did not do in 1950. Sufficient funds should be provided for the decennial census of housing so that the data can be published at the earliest possible date after collection.

Representative TALLE. Your timing was excellent, Mr. Seidman.

(The prepared statement of Mr. Shishkin follows:)

STATEMENT BY BORIS SHISHKIN, DIRECTOR OF RESEARCH, AMERICAN FEDERATION OF LABOR

I. GENERAL CONSIDERATIONS AND RECOMMENDATIONS ON GOVERNMENT STATISTICAL PROGRAMS

The increasing deficiencies in the economic statistics programs of the Federal Government are a matter of first importance to the welfare of the Nation. The Joint Committee on the Economic Report is to be commended therefore for having undertaken an examination of this vital problem.

The statistical tools for economic analysis by our Government and private organizations and individuals are essential for determining the Nation's economic course. Their maintenance and improvement requires the fullest consideration and support.

The time is long since past when statistics were of concern only to technical statisticians. With the increased complexities of modern economic life, statis-

tics are needed to describe what is happening in our vast economy and as storm signals to warn us of what is likely to occur. The increased importance of statistics cannot be doubted when we know that the movements of some statistical series are watched closely by millions of people whose fortunes may even depend on relatively slight changes in these indicators. In a period of rising prices, the Consumer's Price Index made the headlines. Now, the unemployment series receives the major attention. Perhaps in time it may be indexes of productivity which will be closely studied by millions.

Labor has a direct concern in the adequacy of these statistical programs. To be sure, labor is most interested in those statistical series which relate to employment and unemployment, wages, collective bargaining developments and consumer prices. But increasingly, labor has had to be concerned as well with statistics on production, productivity, residential and nonresidential construction, profits, sales, inventories, and many other basic economic indicators.

It is a paradox that despite the growing acceptance and recognition that statistics are essential tools for economic growth; there has been a serious attrition of some of the most important statistical programs of the Federal Government. This weakening of the Government's statistical activities has taken a serious toll by depriving both the Government and private organizations of the tools needed for measuring and appraising fundamental economic developments and for facilitating economic expansion.

The statistical programs of the Federal Government do not serve some groups in the population at the expense of others. On the contrary, they are increasingly required by businessmen and workers as well as by students and technicians. They cannot be replaced by private efforts or private resources. We must look to the Federal Government for basic statistical information because only the Government has the facilities and resources to carry on successfully the essential statistical programs.

The cost of maintaining adequate statistical programs geared to the needs of the economy is almost infinitesimal when compared with either the total cost of Government or economic value of the data derived. Yet, year by year, limitations on appropriations have forced cutbacks in essential statistical programs. Effective economic analysis has been severely handicapped. In labor-management relations, the deterioration of the Government statistical programs has hindered the development of more informed and harmonious bargaining relationships.

The failure to provide necessary funds for the Government's statistical work has had a number of unfortunate results. In some cases it has meant that essential information has been altogether lacking. For example, there have been no figures published since 1943 on the relation of labor cost to total production cost in different industries. In some cases, some data have been made available, but they have been either inadequate or, by the time of publication, out of date. This has been true, for example, of much of the census material.

Another byproduct of inadequate appropriations for Government statistical programs has been the increasing tendency of Federal statistical agencies to resort to mail questionnaires even in instances when it is conceded that only field investigations can yield statistics of unquestioned validity. Still another harmful result of the attrition of the Government statistical programs has been the increasing tendency on the part of the Government statistical agencies to seek private financing of essential Government statistical programs and to make special charges for statistical information. These are only some of the dangerous consequences of the lack of even the minimum funds needed for maintaining the Government statistical programs at an adequate level.

In order not to be misunderstood, let me make one thing clear. Labor has complete faith in the integrity of the statisticians who are responsible for the data collected and published by the Government and in the statistical series which they produce. While we may criticize some aspects of these programs, we do not doubt their basic validity. Nevertheless, we must recognize that the cutbacks and shortcuts which have been forced on the Government statistical agencies by lack of sufficient funds have inevitable detrimental effects on the quality of the data published. Once the soundness of statistics is questioned, they begin to lose their usefulness as tools for economic analysis.

I urge most strongly that this trend toward reduction of appropriations for statistical agencies be reversed. The Congress should realize that it is false economy to deprive the Nation of essential statistical tools. In the long run, the cost to the Nation of such restrictions on essential statistical informa-

tion is far greater than the relatively few dollars that may be saved in annual appropriations.

Even if the statistical programs are adequate in scope and technical quality, it is most important that they be organized so that they are of maximum value for purposes of economic analysis. This means that wherever possible, the definitions used in statistical series should conform with meaningful economic concepts. I recognize that this is not always possible because of limitations in collection and tabulation of the primary data. But the objective of using definitions that do not conflict with economic concepts should be sought wherever feasible. I have in mind, for example, some severe shortcomings of the definition of "unemployment" on which I will comment in detail later.

Before turning to comments on specific statistical series, I want to direct a few remarks to the organization of statistical operations of the Federal Government. We firmly believe that statistical programs can best perform their valuable function when they can be closely related to operating programs.

I know that from time to time suggestions have been made for the establishment in the Federal Government of a central statistical agency which would absorb many statistical programs currently organized in various Government departments. There is a certain surface attractiveness about this proposal, but closer examination of the problem will reveal that the disadvantages of such a change would far outweigh its advantages.

For the Government to set up a central statistical agency might unnecessarily pave the way for unscrupulous administrators to impair the integrity of the statistical data for political purposes. Centralization would undoubtedly make it much easier for the statistical programs to be manipulated than is possible under the existing organization of statistical programs. Even without such unprincipled tampering with the statistical data, however, centralization might create a tendency for the Government statistical programs to be operated on a theoretical plane more or less for their own sake rather than because of their usefulness for down-to-earth economic analysis.

The Office of Statistical Standards of the Bureau of the Budget now has the responsibility for coordinating the programs of the various Federal statistical agencies. On the whole, this agency is doing a good job of appraising and dovetailing the statistical activities of these agencies. Perhaps some improvement would be achieved by broadening and improving consultation among Government statistical agencies and of these agencies with principal outside groups which use the Federal statistical data.

II. Comments and Suggestions for Improving Major Statistical Series of the Federal Government

A. EMPLOYMENT AND UNEMPLOYMENT

Labor has always had a vital interest in statistics of employment and unemployment. In fact, until the Federal Government began to publish official statistics on unemployment, the American Federation of Labor compiled its own figures on national unemployment. Of course, interest in employment and unemployment data always increases in a period of economic recession. But regardless of the phase of the business cycle, labor has a substantial and continuing interest in these figures. Labor is not alone in its interest in these data for they provide essential information for determination of economic policy by the government, business and many other groups concerned with the development of the economy.

Four agencies of the Federal Government publish statistics on employment and unemployment: the Bureau of the Census of the Department of Commerce, the Bureau of Labor Statistics and the Bureau of Employment Security of the Department of Labor and the Agricultural Marketing Service of the Department of Agriculture. The statistics on employment and unemployment published by these agencies are extremely useful. But in order for them to have maximum usefulness, they need to be improved and expanded.

Total employment and unemployment.—The most widely quoted statistics on nationwide employment and unemployment are those published by the Bureau of the Census in the Monthly Report on the Labor Force. Unfortunately, the Census Bureau has adopted a narrow and unrealistic definition of employment and unemployment so that its unemployment series, at a time of increasing unemployment, tends to understate the actual number of unemployed. This happens because the census treats individuals in the "with a job but not at work" category as employed even though many of them are actually unemployed for

economic reasons. Thus the census includes individuals on temporary layoff among the "employed" even though from an economic viewpoint they are unemployed since through no fault of their own they are unable to contribute to the economy.

The definition of "employment" and "unemployment" used by the census should be revised so that all individuals without work during the survey week for economic reasons are classified as unemployed.

In addition, the Monthly Report on the Labor Force should be expanded in a number of respects. For information should be provided on the characteristics of the unemployed including such items as occupation and industry attachment. Also, the census should provide more detailed information on the category "with a job but not at work" which I have already referred to above. In particular, the group within this category listed as "miscellaneous" should be separated into component parts. The Monthly Report on the Labor Force should also be expanded so that it would provide regional and locality data. It should also provide information on gross changes in the labor force and more frequent information on part-time employment, particularly during periods of high unemployment.

Unemployment insurance claimants.—The unemployment figures of the Bureau of Employment Security are a byproduct of the State unemployment insurance programs and relate to the number of claimants for unemployment insurance. Because of conflicting administrative regulations governing eligibility for and duration of unemployment insurance in the various States, the value of this information is somewhat limited. Even so, however, there are a number of ways in which it could be improved.

One important item of information is the number of persons who have exhausted unemployment insurance claims. The data on currently paid claims are somewhat misleading because they do not include this information. Figures on exhaustions are published long after first publication of the figures on claimants. They should be obtained and published each week, particularly during periods of high unemployment. As in the case of the Monthly Report on the Labor Force, it would also be useful to have the most recent industry attachment of those receiving unemployment insurance as an indication of the trouble spots in our economy.

Nonfarm employment.—The Bureau of Labor Statistics collects information from employers on nonfarm employment. In some respects this information is now complete. In particular, more information is needed by locality, especially for nonmanufacturing industries; for a more detailed breakdown of industries (so-called four-digit industries); and in general for the nonmanufacturing sector of the economy.

One important gap in employment and unemployment statistics is the unavailability of adequate information on labor turnover. Yet this is a very useful indicator of business trends and often serves to forecast employment and unemployment developments. It would be highly desirable for the Bureau of Labor Statistics to develop a more accurate sample in this field so as to obtain a more detailed industrial breakdown and also to obtain regional information which is now entirely lacking.

Farm employment.—The farm employment series published by the Agricultural Marketing Service of the Department of Agriculture is based on a mail questionnaire to farm operators who are crop reporters for the Agriculture Department. I question whether accurate estimates of farm employment can be derived from a mail questionnaire, particularly in view of the fact that it is apparently based on a 20 percent return. I therefore seriously question the validity of these data and suggest that serious attention be given to revision and improvement of this important series.

Recommendations

1. The definition of "employment" and "unemployment" used by the Bureau of the Census in the Monthly Report on the Labor Force should be revised so that all individuals without work during the survey week for economic reasons are classified as unemployed. This report should be expanded to provide information on the characteristics of the unemployed, including occupation and industry attachment, more detailed information on the category "with a job but not at work," regional and locality data, gross changes in the labor force and more frequent information on part-time employment, particularly during periods of high unemployment.

2. We would urge that the data on insured unemployment of the Bureau of Employment Security should include current information on the number of persons who have exhausted unemployment insurance claims. It should also provide data on the most recent industry attachment of those receiving unemployment insurance as an indication of the trouble spots in our economy.

3. The Bureau of Labor Statistics nonfarm employment data should be expanded to provide more information by locality, especially for nonmanufacturing industries; and a more detailed breakdown of industries (so-called four-digit industries) for both the manufacturing and nonmanufacturing sector of the economy. The labor turnover data of the Bureau of Labor Statistics should be improved by developing a more accurate sample which would permit a more detailed industrial breakdown and make available regional information which is now lacking.

4. The farm employment series published by the Agricultural Marketing Service of the Department of Agriculture, based on a mail questionnaire of doubtful validity, should be revised and improved.

B. WAGES

Wage statistics are the most important ingredient for the informational background for collective bargaining. For collective bargaining purposes, labor and management need information on job wage rates. Data on earnings of workers may be useful for general economic analysis, but for collective bargaining negotiations it is important to know the actual wage rate paid for the specific occupations within each specific industry. Unfortunately, available data of this type are extremely inadequate.

Reductions in appropriations have forced the Bureau of Labor Statistics to curtail its program of industry-occupation wage data. The result is that such figures are available for too few industries and even the surveys of wage rates in those industries are made at infrequent intervals. In addition, the Bureau of Labor Statistics has been forced to resort to main questionnaires and other questionable data-collection methods. Reliable information on wage rates paid to workers in specific occupations and specific industries can be obtained only by trained field staff making actual plant visits. Occupational definitions are too varied and technical to rely on mail questionnaires. They simply cannot cover adequately all of the complexities of the occupational wage structure and therefore do not yield occupational wage information on a truly comparable basis.

Unfortunately, the Bureau of Labor Statistics in recent years has tended to shift its entirely too meager resources from industry wage surveys to so-called community wage surveys. For collective bargaining purposes, the primary need is for information on comparable rates paid elsewhere in the same industry, regardless of where the particular plant may be located. The community survey suffers from the artificial limitations inherent in wage comparisons made across industry lines in what are in fact largely noncomparable jobs even through they may have the same job titles. Even more important, the community wage surveys are restricted to a limited number of jobs common to many industries and provide very little information for specialized needs.

Actually, important area data are yielded by industry surveys. They are so organized that occupational wage rates are obtained for each major area in which the industry is located. This permits not only comparisons with competing plants in the area but also comparisons within the same industry which cannot be made from the area-type surveys. Therefore, to strengthen the core of information needed for collective bargaining, it is essential that the Bureau of Labor Statistics program of industry wage surveys be expanded.

Recommendation

The industry-occupation wage studies of the Bureau of Labor Statistics should be expanded. The Bureau should be allotted sufficient funds so that it can resume field investigations in place of mail questionnaires and other questionable data collection methods.

C. LABOR COSTS

For many years the A. F. of L. has urged that data be made available for manufacturing as a whole and for important individual industries on labor costs (i. e., direct labor costs as percentage of total cost). At one time the Federal Trade Commission published such data, but they have not been available since

1943. In that year the Federal Trade Commission published a breakdown of the sales dollar for 86 industries, including the cost attributed to direct labor and other labor.

The importance to the parties to collective bargaining of having such data available can be readily seen. Frequently a major question in collective bargaining is just what effect an increase of a given amount in wage rates might have on the company's total costs. Both labor and management need this information.

At the present time, the Federal Trade Commission and the Securities and Exchange Commission publish overall cost data as well as sales and profit figures, but they do not publish information on labor costs. This program should be expanded so that information on various specific costs of production including labor costs can be made available. This could be done with relatively little additional expenditure of funds.

Recommendation

Financial information jointly published by the Federal Trade Commission and the Securities and Exchange Commission should be expanded to provide information on direct labor costs as well as other specific costs of production.

D. COLLECTIVE BARGAINING STATISTICS

With the increased scope and complexity of collective bargaining, wage, labor cost and related data do not provide all of the necessary information which the parties to collective bargaining need. It is important for unions, management, students of industrial relations and the general public to be informed accurately and promptly of developments and practices in the field of collective bargaining. With a woefully inadequate budget, the Bureau of Labor Statistics has been trying to collect and analyze some such information, but its program in this field needs to be greatly expanded. More adequate information in this field would contribute greatly to more mature and informed collective bargaining.

A first requirement is for improvement and expansion of the Bureau of Labor Statistics file of collective-bargaining agreements which provide the raw materials essential for analysis of collective-bargaining developments. The Bureau of Labor Statistics could then expand its analytical work in this field to provide data on developments with regard to such important collective-bargaining issues as grievance procedure, seniority, premium pay, arbitration provisions and a host of other practices and procedures which have been established in collective bargaining. Such expansion would also make it possible for agreement provisions to be classified by industry, size of firm, and other important economic characteristics in order to make them much more useful for collective-bargaining purposes.

Recommendation

The file of collective-bargaining agreements of the Bureau of Labor Statistics should be improved and expanded in order to provide the raw materials essential for analysis of collective-bargaining developments. The Bureau's analytical work in this field should also be expanded.

E. PRODUCTIVITY

Trade unions have always maintained that workers must receive their fair share of the increased goods and services made possible by technological change and economic progress. Therefore, they have been concerned with measures of productivity change as one of the most important indicators of economic growth. I want to emphasize that trade unions are convinced that the wages of industrial workers should not be determined by the productivity of the particular sector of the economy in which the worker is employed. Rather the productivity of the entire economy should be one of the factors considered in determining wages of all workers. Therefore, it is particularly necessary that there be available overall measures of national productivity. Of course, such information is also needed by the Government and many private users in gaging economic progress.

At the present time no statistics on national productivity for the entire economy are being published. I note that in the staff memorandum on productivity of the Bureau of the Budget, the first recommendation states: "An overall measure of national productivity is needed." I would certainly endorse this recommendation and would urge that sufficient funds be made available to the Bureau of Labor Statistics to permit that agency to compute and make available indexes of national productivity.

I also agree with the second recommendation in the staff memorandum which calls for studies of unit man-hour requirements on products and subproducts in selected industries, yielding industrywide, productivity measures. These are the type of industry productivity data which are most useful, not so much in relation to the possible effect they might have on wage determination, but as indicators of the demand for labor. In other words, if the number of man-hours required to produce a given quantity of goods is known, it is possible to arrive at a conclusion as to the number of workers who can be employed in that particular process.

Incidentally, the unit man-hour requirements approach to productivity is useful not only for mining and manufacturing, but also for construction. In fact, in the past the Bureau of Labor Statistics has made such computations for important operations in the construction industry. Funds should be provided for the Bureau of Labor Statistics to resume its work in this field.

Recommendations

1. Sufficient funds should be made available to the Bureau of Labor Statistics to permit that agency to compute and publish indexes of national productivity.

2. The Bureau of Labor Statistics should be provided with necessary funds to permit it to resume its studies of unit man-hour requirements in order to provide important indicators of the demand for labor.

F. PRICES AND COST OF LIVING

The relative stability in prices and living costs during the most recent period has temporarily served to minimize the interest in price data, but it should not be permitted to divert us from consideration of improvement of these important statistical indexes. It should be noted that in the past the price indexes have operated least effectively when price changes were taking place most rapidly and therefore the indexes were most needed. We saw this happen both during World War II and again during the Korean war.

Workers are well aware of the importance of data on prices and living costs in collective bargaining. Trade unions believe most strongly that wages should not be tied to prices alone. But price data are a very important consideration in collective bargaining and adequate price data are necessary in order to permit measurement of changes in real wages.

Precisely because the cost-of-living index is not a particularly controversial figure at this time, I would suggest that this provides an excellent opportunity for basic research on concepts and methods of data collection and computation so that the index will be in the best possible shape when it will again be used very intensively in collective bargaining, economic analysis, and determination of economic policy.

In January 1953 the Bureau of Labor Statistics concluded an extensive revision of the Consumer Price Index, which had not been revised for about 15 years. Such a lapse of time is intolerable if the index is to measure adequately current changes in consumer prices based on current consumer expenditures. I would therefore recommend that the market basket of goods and services on which the index is based should be revised no less often than every 5 years.

One major deficiency in the Consumer Price Index as it is now computed is that while it includes the effect of sales and other excise taxes on the prices that consumers must pay, it does not take income taxes into account. The result is that it cannot accurately measure changes in the purchasing power of workers' wages in terms of what they can actually buy with their incomes. The A. F. of L. has recommended that the Bureau publish 2 indexes, 1 including income taxes and 1, as at present, excluding income taxes. I would urge that this be done as soon as possible.

One difficulty which arises in the field of price statistics is that the Index of Prices Paid by Farmers published by the Department of Agriculture is computed on a different basis from the Consumer Price Index of the Bureau of Labor Statistics. Since these indexes play a large part in determining the income of two of the largest groups in the population, it is most important that they be coordinated to the maximum extent possible. To the extent that such coordination cannot be effected, however, there ought to be a clear official statement of the major differences between the two indexes and the effects of these differences on the level of the indexes.

Recommendations

1. The Bureau of Labor Statistics should undertake basic research on concepts and methods of data collection and computation for the Consumer Price Index. Funds available to the Bureau of Labor Statistics should be sufficient to permit revision of the Consumer Price Index no less often than once every 5 years.

2. The Bureau of Labor Statistics should publish 2 Consumer Price Indexes—1 as at present, excluding income taxes, and 1, perhaps at less frequent intervals, including income taxes. This would permit measurement of the changes in the purchasing power of workers' wages.

3. Maximum coordination should be sought between the Consumer Price Index of the Bureau of Labor Statistics and the Index of Prices Paid by Farmers published by the Department of Agriculture.

G. CONSUMER EXPENDITURES AND FAMILY BUDGETS

Consumer expenditures.—Closely related to price indexes are data on consumer expenditures and family budgets. In fact, the computation of the Consumer Price Index is impossible without consumer expenditures data, and such data must be collected at frequent intervals for the Consumer Price Index to reflect in a reasonably adequate manner changes in consumer spending patterns.

Family budgets.—We need also, at fairly frequent intervals, family budget data in order to determine the level of income required to maintain an adequate standard of living and also to be able to measure intercity differences in living costs. To provide such information, the Bureau of Labor Statistics has from time to time computed the City Workers' Family Budget. Unfortunately, this budget has not been revised to take account of changes in consumption habits since the war or even of price changes since 1951. There is a wide need for such information on a more current basis for collective bargaining as well as for many other purposes. I strongly recommend that the Bureau of Labor Statistics be provided with necessary funds to permit immediate and complete revision of the budget and also periodic revision at intervals not less often than once in 5 years. Since the basic price information is already being collected, this could actually be done with expenditure of relatively little additional funds.

Recommendations

1. The Bureau of Labor Statistics should collect information on the pattern of consumer expenditures at frequent intervals in order to keep the Consumers' Price Index reasonably up to date.

2. The Bureau of Labor Statistics should be provided with necessary funds to permit immediate and complete revision of the "City workers' family budget and also periodic revision at intervals not less often than once in 5 years.

H. INDUSTRIAL INJURIES

Industrial accidents represent one of the most neglected fields of data collection. Yet, it is most important that we have such data for safety promotion in industry, determination of workmen's compensation policy and for formulation of effective rehabilitation programs.

The existing information published by the Bureau of Labor Statistics is extremely spotty and should be supplemented by data for industries and States on the total volume of industrial accidents, State data on injury rates and information for specific industries on accident causes and methods of prevention. In addition, information is needed on accident costs, analysis of workmen's compensation programs and rehabilitation programs in all of which fields little or no information is now available.

Even these recommendations comprise only a partial list of the information we ought to have if we are to begin to know the facts about the toll of accidents and deaths in industry, what is being done to prevent them, how affected workers and their families can maintain their incomes and how we can rehabilitate as many victims of industrial accidents as possible for reemployment.

Recommendation

The Bureau of Labor Statistics should obtain data for industries and States on the total volume of industrial accidents, State data on injury rates, and information for specific industries on accident causes and methods of prevention. It should also publish information on accident costs as well as analysis of workmen's compensation and rehabilitation programs.

I. FAMILY INCOME AND SAVINGS

Family Income.—There is only one brief mention of this important field in the material which has been submitted to this subcommittee by the Bureau of the Budget. Yet, it is a very important area and one which has been very much neglected in Federal statistical programs.

Figures on family and individual incomes are available annually as a by-product of the current population survey of the Bureau of the Census. But the figures are not published until more than a year after they are collected (e. g. 1952 figures were published on April 27, 1954). It is most important for purposes of economic analysis that these figures be published as quickly as possible. I would therefore recommend that the time schedule for this series be speeded up.

Savings.—It is important to have information on the distribution of savings among families and individuals in order to determine the financial capacity of American families to undertake investments in housing and consumer durable goods and also as an indication of the adequacy of such savings as a cushion in the event of individual setback or general economic recession.

None of the regular statistical agencies in the Federal Government publish figures on the distribution of savings or its components among families and individuals. Such figures are available in the annual survey of consumer finances conducted by the University of Michigan for the Federal Reserve Board. But because of the small sample which is used for this survey, it is highly questionable whether these figures are accurate.

I would suggest that it might be possible to obtain figures on the distribution of savings among families and individuals along with the income data in connection with the current population survey of the Bureau of the Census.

Recommendations

1. Data on the distribution of incomes of families and individuals in the current population survey of the Bureau of the Census should be published more promptly after collection.

2. Figures on distribution of savings among families and individuals should be obtained and published in connection with the current population survey of the census.

J. HOUSING AND CONSTRUCTION

Despite the wide uses to which housing and construction statistics are put by Federal, State and local governments, as well as private organizations and individuals, there has been an appalling lack of data for this very important sector of our economy. The inadequacy of these statistics was recently highlighted when the Advisory Committee to the President on Government Housing Policies and Programs was forced to formulate its recommendations with a very incomplete knowledge of housing requirements and the conditions of the housing market.

The Bureau of the Census and the Bureau of Labor Statistics, the two agencies which have the major responsibility in providing housing data, have had to curtail their programs because of drastic cuts in appropriations. The result has been that users of housing statistics have been forced to rely on sporadically collected data which too often have been relatively unreliable and in the long run uneconomical.

At various times in the past the Bureau of Labor Statistics has begun to collect certain types of housing and construction statistics which have been most useful only to be forced to drop these projects after a very short time because of lack of funds. We think that at the very least funds should be made available for the Bureau of Labor Statistics to resume these programs. Among them are data on the characteristics of new housing as well as the characteristics of the buyers and tenants of new housing, additions and subtractions from the housing inventory, and construction labor requirements.

One of the most important sources of housing information is the decennial census of housing. It is essential that sufficient funds be provided to the Bureau of the Census so that it can not only collect the necessary data, but also be able to tabulate and analyze the data in the most usable form for publication at the earliest possible date after collection. For the next decennial census the data collected in the 1950 census should be expanded and improved to provide certain types of data now lacking which would indicate the characteristics of the available housing supply. In addition, the census should conduct intercensal surveys

of housing on a sample basis. With a relatively small expenditure of funds, such intercensal surveys would provide the information on the same items as the decennial census for the United States, regions and large urban centers. Such sample surveys should be undertaken annually or at the very minimum, biennially.

Recommendations

1. The Bureau of Labor Statistics should be provided with funds to publish information on characteristics of new housing as well as the characteristics of the buyers and tenants of new housing, additions and subtractions from the housing inventory and construction labor requirements.
2. Sufficient funds should be provided to the Bureau of the Census so that it can tabulate and analyze data from the decennial census of housing for publication at the earliest possible date after collection.
3. The data in the decennial census of housing should be expanded and improved to provide information not now available on the characteristics of the available housing supply.
4. Funds should be appropriated to permit the Bureau of the Census to conduct, not less often than every 2 years, intercensal surveys of housing on a sample basis which would provide information for the United States, regions and large urban centers on the same items as the decennial census.

Representative TALLE. We will proceed now to hear Dr. Paul W. McCracken, professor of business conditions, School of Business Administration, the University of Michigan.

You are a native of Iowa, aren't you?

Mr. MCCRACKEN. That is correct.

Representative TALLE. As a fellow Iowan, you know I am glad to see you here this morning.

Mr. MCCRACKEN. Thank you, Mr. Chairman.

STATEMENT OF PAUL W. McCRACKEN, PROFESSOR OF BUSINESS CONDITIONS, SCHOOL OF BUSINESS ADMINISTRATION, UNIVERSITY OF MICHIGAN, ANN ARBOR, MICH.

We all agree that adequate and timely economic statistics in a free economy are necessary information for sound business and governmental decisions. It is good, therefore, that the Joint Committee on the Economic Report is conducting this inquiry.

In the June Federal Reserve Bulletin there are 75 closely printed pages of statistical data. Most of these statistics deal with financial developments in our enonomy, or with international financial transactions of concern to this country. The final 40 pages of the Commerce Department's Survey of Current Business are devoted entirely to the publication of contemporary statistical information, much of it about financial matters. Each month the Treasury Department issues its Bulletin containing about 80 pages of statistics on budget, public debt, and international operations. This list could, of course, be extended almost indefinitely. But it is long enough to highlight a matter about which there would be pretty general agreement. Our supply of financial statistics is both more plentiful and reliable than is true for many other areas of economic activity. The excellence of this statistical information is reflected in at least three important ways.

The data are reported regularly. The importance of this continuity for analytical purposes is obvious.

The data in most cases extend back further into history than nonfinancial data. Data on the assets and liabilities of all banks, for example, are now readily available from 1834 to date, and much public

finance statistical information is available from 1789. Thus we can in this area obtain considerable historical perspective about how we got where we now are, something which is not possible with more recently developed measures of economic activity.

Most of these financial data are available in substantial detail, and for analytical purposes that is also important. We not only have a gage of broad aggregates, but we can study specific pieces of the economy. We have, for example, information not only about interest rates charged by banks but also information about rates by size of loan by area of the country.

In many cases what we want to measure is less complex and difficult to define, and therefore to measure, in the financial field than elsewhere. Total bank deposits, for example, are a much less complex matter to define and measure than national income, or productvity, or the price level. Some of this information (e. g., assets and liabilities of banks) has been a byproduct of regulatory activities. It reflects, therefore, substantially greater reliability than more informally collected data.

We must, I think, pay primary tribute here to the long tradition of high competence and professional integrity on the part of the staffs in the Federal Reserve and other relevant agencies. We are, in fact, indebted to the Federal Reserve for some of the pioneering in important areas outside financial statistics. The official industrial production index was developed and is still produced by the Federal Reserve. Their indexes of department store trade are another illustration. Statistics are never good automatically. This continued admirable degree of competence and technical soundness is importantly responsible for the fact that financial statistics are both plentiful and generally of exceptionally high quality. The objective of this subcommittee's present venture can, I believe, be importantly fostered by endorsing and insisting upon these high standards of competence and professional integrity, as well as by pointing out blind spots in our current inventory of statistical information.

There are nevertheless many ways in which our statistical "intelligence" about financial developments could be improved. First there are some relatively minor items worth mentioning.

1. The excellent "Banking and Monetary Statistics" needs to be brought up to date and republished. With the publication of this "encyclopedia" of financial statistics we had for the first time a ready source for data which heretofore had been scattered among innumerable separate sources, many not readily accessible. Its publication not only saved an enormous number of man-hours on the part of analysts and scholars but also made useful but otherwise inaccessible data more generally available.

But this volume was published in 1943, 11 years ago. And the last year for which data are available in the book is 1941. Its contents are, therefore, increasingly becoming of largely historical interest. Recent data, which are most frequently used, must once again be fished out of the separate sources, with the consequent great waste of man-hours out in the field. Moreover, many statistical series have been revised, with the result that some of the historical data in this book are now obsolete.

The man-hours required to bring this source book up to date would, no doubt, be large. But they would be considerably more than offset by the man-hours saved by "consumers" of statistics, and such a venture would seem clearly to constitute a justifiable use of Federal Reserve earnings.

The same point should be made also for the Commerce Department's monumental "Historical Statistics of the United States. 1789–1945."

2. There should be a periodic "audit" of terms and explanatory material as well as of the figures. A simple example will illustrate this point. The Federal Reserve each week issues a mimeographed release giving the assets and liabilities of banks in leading cities. In the Bulletin these data are also published, though in somewhat more detail.

One item in the weekly release is "Time deposits except Government." Clearly the total of the non-Government time-deposit items in the monthly Bulletin ought to equal the item in the weekly release, but it does not. A bit of sharp-pencil work finally discloses that "Time deposits except Government" includes time deposits of State and local governments. The fact that the word "Government" in the weekly release is capitalized perhaps signifies Federal Government only, though that presupposes a fairly high degree of etymological sophistication on the part of users of these data. The confusion could be dispelled, of course, if the item in the weekly release were "Time deposits except United States Government."

3. Where balance-sheet data are being presented, the complete balance sheet should be given if possible, because in many cases for presentation purposes, that is useful to have.

4. One of the great statistical developments in recent years has been the provision of detailed national income data. We now have a regular and continuing "income statement" for the whole economy. The usefulness of this more comprehensive portrayal of economic activity is now fairly generally appreciated, and the significance of this advance could scarcely be exaggerated. National-income data like all income statements, however, present a very summary picture of economic activity, and much important information has been consolidated out entirely. Basic research into the nature of our economic system requires that this information be brought into the picture. Two areas for further exploration suggest themselves immediately.

(*a*) Basic research on so-called interindustry or input-output analysis should be continued. I am not myself an expert or technician in these matters, so speak only as one generally concerned about advancing and sharpening methods of portraying statistically or quantitatively the operations of our economic system. An important virtue of this type of analysis, as I understand it, is that it does bring explicity into the picture important intermediate transactions which national income accounting by its very nature tends to consolidate out of the picture. Thus this work might be considered a natural methodological extension or complement of current, established national income accounting.

How useful such information has been to date is a matter of some debate. One study just concluded at the University of Michigan

indicates that logically such information when improved and refined ought to be useful to some types of companies in their industry analysis and forecasting and budgeting. For others it seems logically to have less value.

Some of this pioneering, exploratory research ought perhaps to be carried out under private auspices. The nature of this work makes it, however, large-scale and extensive in character. Moreover, an important problem is improvement in basic data. Consequently substantial Government participation seems essential if interindustry relations or input-output analysis research is to move forward.

(*b*) A needed complement to national-income accounting is a system of data showing how savings in our economy get to potential borrowers. The present national-income accounts, presented each month on page 1 of Economic Indicators, show the groups who spend short of their income or save, and those who spend beyond their incomes or "deficit spend." That this appears each month in this publication highlights our recognition that this is a fairly important matter. If consumers, for example, decide to cut back their spending and save more, and no one else wants to deficit-spend more, business conditions will weaken.

It has always seemed strange to me that a Nation in which knowledgeable laymen now understand the relationship between savings and investment, and each quarter have statistical increases of them provided, has no correspondingly regular, systematic body of data to show how the savings get to the borrowers. A good deal of the problem of economic instability in all probability arises out of the roadblocks savings encounter in getting to borrowers even though the volume of savings in the aggregate is the "right" size.

Most, though not all, of the needed basic data is currently being collected. The remaining primary requirement is the development of a system of presentation comparable in logical clarity and intelligibility to the national income data—called in Economic Indicators "the Nation's economic accounts."

5. One of the major financial developments in recent years has been the great growth in pension funds. This committee took cognizance of this development with its study published 2 years ago of "Pensions in the United States." It is estimated that 2 to 3 billion dollars of our annual savings now flow through these pension funds. How these funds are investing this money becomes a matter of substantial importance in many types of financial analysis. It seems clear, therefore, that there is a great need at the present time for regular, continuing, and fairly frequent publication of data on pension-fund assets. The principle that it is always desirable to publish the complete balance sheet or position statement seems to me to hold here also. The composition and growth of assets, however, is the matter of particular importance to financial analysts. What we need, in short, is the kind of information now made available about banks, and less frequently—indeed too infrequently—about insurance companies, mutuals funds, and other media of investment.

6. My sixth comment deals with the urgent need for a census of manufacturing, mining, and business. Other witnesses have commented on that and I will simply pass that by, saying I wholly sub-

scribe to what they have pointed out in regard to the need for this basic benchmark information.

7. There are at least three important weaknesses in our basic information about business finance.

First, financial information about smaller, unincorporated businesses and trade and service establishments generally is exceedingly scanty. For a Nation which very properly emphasizes the importance of smaller businesses, we have surprisingly little regular factual information about them. The most important weaknesses are, of course, the lack of any regular tabulations of income-statement and position-statement—balance sheet—data. Difficult problems are, of course, involved, not least of which would be the sketchy character of basic records. But much progress could be made to fill in this blind spot, in order to make our statistical knowledge of small-business finance somewhat more comparable with what is currently known about larger businesses.

Second, for many analytical purposes it would be useful to have summary balance-sheet tabulations which would be parallel and comparable to production or sales information. Because many companies have complex multiproduct lines, classification problems do become much more complex with position-statement than with sales and production data. Though much progress has been made—e. g., the current reports on manufacturing corporations—more work yet needs doing.

Third, the 3-to-4 year lag in the tabulation of corporate income-tax returns means that a very important source of basic data is quite tardy. The Bureau of the Budget, in its memorandum to this subcommittee, rightly emphasizes that narrowing down this lag to a year or less would be a major contribution.

8. One of our really pressing needs, underlined by the great rise in the price level since the war, is better measures of the significance of price-level changes on various segments of the economy. Information on gross national product and disposable incomes in "real" terms is currently made available. But in other important areas much more needs to be done.

Data on the book value of inventories, for example, are exceedingly difficult to interpret. Because of varying methods of handling inventories—LIFO, FIFO—and some have suggested NIFO, next in, first out—it is virtually impossible to disentangle from a change in book value of inventories the change in physical volume of stuff in inventory on the one hand and the change due to price-level variation on the other. The result is that relationship between inventories and sales, which ought to be a key relationship in our economy, cannot be observed very meaningfully with present data.

The problem becomes more acute when we move on to data on business profits, and is, much more complex than simply deflating reported profits data by some appropriate index. The problem arises because charges against sales or costs reflect varying price levels. It is increasingly recognized that a substantial rise in the price level results in an overstatement of profits because capital committed to plant and equipment continues to be accounted for as a cost at the old, lower price level. Costs of materials may also be charged against sales at lower than current prices, thereby also overstating profits.

(National income data do include an adjustment for this through the "inventory valuation adjustment" item.)

These problems are much more acute for some companies than others. In general the larger the investment in plant and equipment per dollar of sales the greater is the impact of this price-level effect on profits. And indeed it is precisely this differential impact which makes the whole matter more urgent, because it distorts comparisons of profits and profitability among different lines of business.

9. One of the wholly desirable developments in recent years has been the provision of more and more information on regional business and financial trends. The importance of this is obvious. Many businesses are largely interested in developments only in a State or a region. This work, of course, involves such complex matters as allocating to a State or a region only the relevant part of a reporting company's operations, or interstate or interregional business transactions. But the need is there, and it requires no clairvoyance to predict that the demand for this information will become more insistent in the future.

10. Finally, the immense usefulness of special, noncontinuing studies deserves endorsement. The many studies issued by the Joint Committee on the Economic Report, pulling together data on specific problems, point in the right direction on this matter.

One in the financial area which is very much needed is a study which would give us some concrete, empirical evidence of what happens with important changes in monetary and credit Federal Reserve policy. One of the "great debates" of recent years has had to do with the role and usefulness of more active credit, monetary, and debt-management policies in a program of economic stabilization. The Joint Committee on the Economic Report played a major role in sharpening national thinking on these matters through the two major inquiries into this problem.

My own view happens to be that these issues were resolved well, and that in recent years we have had good credit and monetary policy.

Nevertheless, the empirical case for the active use of monetary policy is still sketchy. Is there evidence that private or public spending plans are altered by changed credit conditions arising out of a change in policy? What is the nature of the evidence? What kinds of spending decisions were altered? These are some of the questions about which more evidence is needed, and current research techniques are adequate to make considerable headway on this important matter. The accord of 1951, the tight-money era of early 1953, and the easy-credit policy since the mid-1953 turnabout suggest themselves as three ideal times when such studies could have produced useful empirical material.

At some point I would like to make a comment on the matter of the speediness with which data are made available, but I think that can be reserved until this afternoon.

Representative TALLE. Very good timing, Mr. McCracken.

We will now hear Mr. Kenneth Miller, manager of the economic research department of Armour & Co., Chicago, Ill.

Mr. Miller.

49377—54——16

STATEMENT OF KENNETH E. MILLER, MANAGER, ECONOMIC RESEARCH DEPARTMENT, ARMOUR & CO., CHICAGO, ILL.

Mr. MILLER. It is a privilege for anyone who regularly works with statistical tools to appear before your Subcommittee on Economic Statistics. Statistics whether prepared by Government, by trade association, or inside our own firm need regular review.

The memorandums submitted to the subcommittee by the Bureau of the Budget are very informative. I hope that the committee can make arrangements to make this information available to business researchers, educational institutions, Government staff, and others.

It is heartening to see a congressional committee devoting time to statistical policy. There are broad questions of policy which need long-term solutions.

If better planning of statistical work is to be done, something is also required from respondents. Also, too little thought and investigation is given to determining what kind of data business firms can readily supply.

Business concerns find it extremely costly to supply the varied kinds of information either required by law or requested on any one of several bases. Ordinarily where respondents understand the usefulness of the data being supplied to Government, there is little objection to report.

In recent years, advisory committees to the various statistical agencies have been appointed to review statistical programs. It was my pleasure to serve on one of these committees for over 2 years, and it is my opinion that these committees should be encouraged.

Not long ago we received complex questionnaires on lard refinery operations. Interesting questions were posed. Some of the answers we would like to have known ourselves. But Armour didn't believe we could fill in the schedules. Neither did one of the investigators after we arranged for him to spend some days in a refinery.

The reorganization of the Department of Agriculture left many statistical problems unsolved. Certain principles need to be applied to the internal statistical work. For instance, it seems there should be no distinction between statistical and nonstatistical divisions.

Information collected from industry for administrative or other purposes should be required to be tabulated and released upon a proper showing of industry and/or other interests. An exception should be made only where there is a proper finding that the release would be inimical to national security.

Market News data on livestock movement, prices, and product prices need improvement. Since our company makes much use of Market News information, we have devoted considerable effort to finding out much about the characteristics of the various series. Sampling procedures could provide more adequate information on many items at moderate cost.

Market News reports on wool prices appear unreliable in that they often lag by several weeks the quotations of private price reporters. The sensitivity of Government wool quotations are an inadequate guide so far as Armour wool sales and purchases are concerned and probably do not reflect market conditions adequately for wool growers.

If it is desirable to have regular USDA price series representing

the detail of wholesale meat price quotations, then it is important that they be reliable and sensitive to market change. At present the trade reliance has to be placed largely on private reporting services for current prices on many meat items.

The entire livestock industry, including farmers, packers, retail meat buyers, need the same essential information on livestock and meat supplies. The USDA monthly report of cold storage stocks of meats in packinghouses and public warehouses is most widely used. However, the schedule used for collecting the information is badly in need of modernization. Industry recommendations have been in Government hands for several years.

Generally the programs of the division of agricultural estimates appear to be one of the best coordinated within the Federal Government. Cooperative relationships established with the State departments of agriculture aid an integrated county, State, and United States statistical program and should be encouraged in other statistical agencies.

The pig crop surveys are widely known but semiannual reports are no longer sufficiently frequent. To improve the whole livestock estimating program it appears that a monthly livestock schedule should be established. For instance, at present farmers do not receive any calf or lamb crop information until after the young are several months old. Thus they lack assistance in planning this production.

Planning a census of agriculture is a big job, handling it is bigger, and the uses made of resulting data are myriad. I join many others in favoring full enumerative censuses on regular schedule. I leave to the operators the question of whether it is possible to get a good enumeration with the late start now inevitable for 1954.

The overall economic interrelations between agriculture and the rest of the economy become clearer through data on processors provided through the Census of Manufactures and of Distribution. Closer planning can increase the value and reduce respondents as well as Government costs.

Armour has attempted to use the packing industry figures released in the Industry Survey of the Department of Commerce. The data form a part of the overall information on manufacturers sales, inventories, and new orders.

The too general procedure of placing a firm's entire data in a fixed industry classification results in much confusion. There are few discreet industries. However, product classes can be separated as the Census of Manufacturers has demonstrated.

Many of us are interested in foreign trade facts, especially early and accurate product data on volume of exports and imports. The Commerce Department's plans for improvements are good news. We look forward to prompt receipt of monthly product data.

My comments have been confined to certain agricultural sectors with which I am most familiar. I have presumed that other users of statistics at these hearings will cover many of the data series which my company uses in market research, labor and transportation negotiations, and in guiding executive decisions.

Representative TALLE. Thank you for your testimony, Mr. Miller.

(The complete statement of Mr. Miller follows:)

STATEMENT OF K. E. MILLER, MANAGER, ECONOMIC RESEARCH DEPARTMENT, ARMOUR & CO., CHICAGO, ILL.

Participation in a review of statistical work is a privilege for anyone whose regular activity involves collection, analysis, or interpretation. Statistics, whether prepared by Government, by trade association, or inside our own firm, need regular review. The memorandums submitted to the subcommittee by the Bureau of the Budget are very informative. I hope that the committee can make arrangements to make this information available to business researchers, educational institutions, Government staff, and others.

Experience over the years in dealing with many Federal agencies has convinced me that high-quality statistical work usually is developed as an integral part of operations, as is primarily true in business also. Coordination must be continuously worked at, but consolidation of statistical branches into a single group would result in many new problems and in less expert handling in many instances.

It is heartening to see a congressional committee devoting time to statistical policy. There are broad questions of policy which need long-term solutions. Efficient statistical operation, either public or private, requires regularity and long-term planning. A job cannot be set up properly or efficiently executed if questions are still unsettled at the time that a survey should be getting into the field. If better planning of statistical work is to be done, something is also required from respondents. Instructions and intent of Government schedules have frequently failed to reach down to the actual persons who fill out the schedules which business furnishes the Government. Also too little thought and investigation is given to determining what kind of data business firms can readily supply. A mechanically perfect questionnaire, even though it asks complex questions, gets answers, but not reliable or consistent ones.

Individuals who actually fill out the form are often not instructed as to what is wanted nor have any idea of how the combined information will be used either inside Government or after release. Therefore they do things the easy way since their duties are always more pressing.

Business concerns find it extremely costly to supply the varied kinds of information either required by law or requested on any one of several bases. Ordinarily, where respondents understand the usefulness of the data being supplied to Government, there is little objection to report. There is a strong desire, however, that combination schedules be prepared and standards set so that a single report in an individual subject area may go to each of several local, State, or Federal agencies requiring information.

Since business concerns almost uniformly want certain summary data released more promptly than has been characteristic of agency operation, they must take responsibility for seeing that employees return schedules promptly. Improvement in instruction procedures and some "selling" on the part of Government agencies will help accomplish this.

In recent years advisory committees to the various statistical agencies have been appointed to review statistical programs. It was my pleasure to serve on one of these committees for over 2 years, and it is my opinion that these committees should be encouraged. It occurs to me that too many committee members represent primarily consumers of statistics rather than including those who perform the actual reporting. In general, these committees should include accountants who have authority to prepare the accounting instructions which translate company records to complete the report form. In our own company, instructions for Government reports are prepared by the heads of our accounting departments since employees in many geographical locations must work on the actual forms.

Collection of high quality basic data lags far behind in many sectors. At the same time too many economists set up theory models and try to fit existing data of poor quality into them. Not long ago we received complex questionnaires on lard refinery operations. Interesting questions were posed. Some of the answers we would have liked to have known ourselves. But Armour didn't believe we could fill in the schedules. Neither did one of the investigators after we arranged for him to spend some days in refinery with complete access to what was happening and full contact with personnel and with accounting and operating records.

The reorganization of the Department of Agriculture left many statistical problems unsolved. Certain principles need to be applied to the internal statistical work.

For instance, it seems there should be no distinction between statistical and nonstatistical divisions. For the latter quality information from industry for administrative or other purposes they should be required to tabulate and release the data upon a proper showing of industry and/or other interests. An exception should be made only where there is a proper finding that the release would be inimical to national security.

As an illustration, the Packers and Stockyards Section in the USDA requires annual sales and profit figures from meatpackers along with data on direct and public market livestock purchases. For several years past no release of any of this information has been made despite repeated requests.

In contrast to the above illustration the Meat Inspection Branch as part of its regulatory work obtains from its inspectors and from packinghouse clerks many data on meat operations primarily to control inspectors' workloads. This agency tabulates and makes available to all interested parties much detail on livestock and meat supplies by products. All the figures are of high reliability, quite specific, and promptly released.

By comparison Market News data on livestock movement, prices, and product prices are of poorer quality, although available rapidly. Since our company makes much use of Market News information, we have devoted considerable effort to finding out much about the characteristics of the various series. It appears desirable that improvements should be made in the weighted average price of cattle and lambs at major livestock markets. Probably the adequate hog price series could be prepared with less expense by using modern sampling techniques. Use of a sampling design for cattle and lamb prices could keep costs moderate. Furthermore, sampling procedures could provide more adequate information on such items as hog receipts by weight ranges and the proportion of spring and feeder lambs in lamb receipts.

Market News reports on wool prices appear unreliable in that they often lag several weeks behind Private Price Reporters. The sensitivity of Government wool quotations is an inadequate guide so far as Armour wool sales and purchases are concerned and probably does not reflect market conditions adequately for woolgrowers.

Adequate price information on the increasing quantities of the wool clip sold on the country level are not available from Government sources. Research needs to be inaugurated on this problem particularly so that the planned production program will have necessary price information to administer payments to growers.

If it is desirable to have regular USDA price series representing the detail of wholesale meat price quotations, then it is important that they be reliable and sensitive to market change. At present the trade reliance has to be placed largely on private reporting services for current prices on many meat items.

Market News collects monthly on form L. S. 149 (copy attached) operating detail on livestock slaughter. Since schedules are filed by each of several hundred plants it is possible to release regional summaries as well as United States totals. Recently that has begun but the regional summaries should be prepared on all items reported.

The entire livestock industry, including farmers, packers, retail meat buyers, need the same essential information on livestock and meat supplies. The USDA monthly report of cold-storage stocks of meats in packinghouses and public warehouses is most widely used. However, the schedule used for collecting the information is badly in need of modernization. Industry recommendations have been in Government hands for several years.

Fortunately improvements in other agricultural statistical sectors are underway. Generally the programs of the Division of Agricultural Estimates appear to be one of the best coordinated within the Federal Government. Cooperative relationships established with the State departments of agriculture aid an integrated county, State, and United States statistical program.

Unfortunately improvement in livestock estimates has lagged behind the good work done on crops. An area of needed activity is the improvement in weighted average farm price for each class of livestock by States.

Improvement is also needed in information on livestock feeding. Because of the unreliability of feeding reports several private agencies have developed in certain States; their information is available only to subscribers.

The pig crop surveys are widely known but semiannual reports are no longer sufficiently frequent. Considerable experimental work has already resulted in quarter surveys in six States. To improve the whole livestock estimating program it appears that a monthly livestock schedule should be established. This would provide other needed livestock information as the questions could be rotated depending upon the monthly timeliness. For instance at present farmers do not receive any calf or lamb crop information until after the young are several months old. Thus they lack assistance in planning their production. Planning a census of agriculture is a big job, handling it is bigger, and the uses made of resulting data are myriad. I join many others (see Intensive Review Data Report) in favoring full enumerative censuses on regular schedule.

County detail cannot be obtained from the usual sample census. I leave to the operators the question of whether it is possible to get a good enumeration with the late start now inevitable for 1954.

This year it seems that a sample census adequate for reliable State totals for individual crops and livestock species is preferable to a poor and date-staggered enumeration.

Agriculture's interests are not adequately covered without full information on the processing industries. The overall economic interrelations between agriculture and the rest of the economy become clearer through data on processors provided through the census of manufactures and of distribution. These are expensive processes, both for business and Government. Closer planning can increase the value and reduce respondents' as well as Government costs.

For instance, business firms need to know longer in advance what the schedules will require, and when the job is to be done. Substantial wasted effort resulted when last year's plans had to be scrapped.

Armour has attempted to use the packing-industry figures released in the industry survey of the Department of Commerce. The data form a part of the overall information on manufacturers' sales, inventories, and new orders.

Our own reporting experience will indicate where improvement could be made. Perhaps data for other industries need similar scrutiny. Since 1939, as requested, we reported for each fiscal month total domestic corporate sales and inventories on OBE Form BE–3a. There are no detailed instructions, nor do we know of any check to cover shifts in coverage or to study desirable changes.

The schedule does not ask for meat products and really obtains a varied product mix including inedible and nonrelated items. Furthermore, benchmarks have been established from income-tax data again on a corporate basis, rather than by product classes.

The too general procedure of placing a firm's entire data in a fixed industry classification results in much confusion. There are a few discrete industries. However, product classes can be separated, as the census of manufacturers has demonstrated.

It is desirable that similar goods may be summed. Thus it can be published in form understood in each industry. Not only does it become more useful but confusion and incorrect conclusions are avoided.

Many of us are interested in foreign-trade facts, especially early and accurate product data on volume of exports and imports. The Commerce Department's plans for improvements are good news. We look forward to prompt receipt of monthly product data.

My comments have been confined to certain agricultural sectors with which I am most familiar. I have presumed that other users of statistics at these hearings will cover many of the data series which my company uses in market research, labor and transportation negotiations, and in guiding executive decisions.

Form LS-149 (2-6-53) | U. S. DEPARTMENT OF AGRICULTURE PRODUCTION AND MARKETING ADMINISTRATION LIVESTOCK BRANCH WASHINGTON 25, D. C. | BUDGET BUREAU NO. 40-R657.8 APPROVAL EXPIRES JANUARY 15, 1954

MONTH BEGINNING ____ AND ENDING ____ 19

MONTHLY LIVESTOCK SLAUGHTER REPORT

TO FEDERALLY INSPECTED SLAUGHTERERS:

This monthly slaughter report is a continuation of reports furnished the Department on a voluntary basis since 1923. These reports serve as the basis for estimating slaughter and meat production under Federal inspection which is essential in planning production, marketing and slaughter programs. Without the continued cooperation of slaughterers in furnishing this monthly slaughter information it will be impossible for the Department to supply the livestock and meat industry and others with accurate information on slaughter and meat production.

We know you realize the need for this information and hope that we may be assured of your cooperation by reporting your monthly slaughter to the Department. Reports for individual companies and plants will be held strictly confidential.

There are enclosed two copies of this form, one copy is for your files and the other for return to this office. It will be appreciated if you will mail your report within 10 days after the close of your monthly accounting period.

A return addressed envelope, which does not require postage, is also enclosed for your convenience in mailing your report.

NOTE: Report all animals slaughtered in your plant, whether for your account or for the account of others, but do not include livestock, the carcasses of which were totally condemned.

KIND OF ANIMALS	NO. OF HEAD (a)	TOTAL LIVE WEIGHT (POUNDS) 1/ (b)	TOTAL DRESSED WEIGHT (POUNDS) 2/ (c)	TOTAL LIVE COST (DOLLARS) 3/ (d)
CATTLE				
STEERS - Including Heifers bought in mixed lots with Steers- (01)			REPORT TOTAL DRESSED WEIGHT ONLY IN SPACE BELOW ↓	
HEIFERS- Do not include those bought in mixed lots reported above (02)				
COWS (03)				
BULLS AND STAGS (04)				
TOTAL CATTLE (05)				
CANNERS AND CUTTERS 4/ (included in all cattle) (06)		XXXX	XXXX	XXXX
CALVES (07)				
HOGS (08)				
SHEEP AND LAMBS (09)				

(10) CLASSIFICATION OF ALL HOGS AND SHEEP SLAUGHTERED

NO. OF HOGS 5/			NO. OF SHEEP AND LAMBS	
BARROWS AND GILTS	SOWS	STAGS AND BOARS	SHEEP	LAMBS AND YEARLINGS

Name of Firm _____ Establishment No. _____

Business Address _____ (NO.) (STREET) (CITY) (STATE)

DO NOT USE THIS SPACE

EDITED	PUNCHED	CHECKED	O.K.	CODE NO.

A001-W600

(SEE REVERSE SIDE FOR INSTRUCTIONS)

INSTRUCTIONS

1/ Weight at time and place of purchase if for immediate slaughter. Use transfer weight of animals from own feed lots.

2/ Dressed weight for all carcasses is the chilled weight. For beef, with the kidney knob in; for veal, with the hide off or adjusted to hide off basis; for lamb and mutton, with the pluck out; for pork, with the leaf fat and kidneys out, the jowls on, and head off.

3/ Amount paid for animals, including expense for transportation, feed in transit, and commission paid. Do not include expense for own buyers or overhead. Use transfer cost for animals obtained from own feed lots.

4/ Report the number of canners and cutters as a separate group based on carcass grading in the plant in addition to reporting them in the classification as cows, heifers, and steers.

5/ Note that gilts are to be reported with barrows instead of with sows as on former reports.

Representative TALLE. I appreciate more than I can say that the panel members have respected the rule as to time. It certainly is appropriate that we should have a lady on this panel, and one whose name is so familiar to many households in the United States, Dr. Hazel Kyrk.

You used to teach in my State, did you not?

Miss KYRK. In Chicago, Illinois.

Representative TALLE. Were you not at Iowa State College?

Miss KYRK. Yes. I was. I am sorry. I misunderstood.

Representative TALLE. Let me mention some other names that everybody knows—Wellesley, Oberlin, Stanford, Iowa State College, University of Chicago. I spent several years at the University of Chicago. Records show that you have served well at all of these institutions.

Then I think everyone will forgive me if I mention a book that you wrote last year, the title of which is The Family In the American Economy, that deals with the foundation of our society.

We are pleased to hear you, Dr. Kyrk.

STATEMENT OF HAZEL KYRK, WASHINGTON, D. C., FORMERLY PROFESSOR OF ECONOMICS, UNIVERSITY OF CHICAGO

Miss KYRK. I was not quite such a migratory laborer as those statistics might indicate, but I thank you for the advertisement of my book.

The data on consumer income have been increasing rapidly in the last decade and, relatively speaking, we are now rather fully supplied. They include the estimates of personal income made by the Department of Commerce on a monthly basis for the Nation as a whole and on an annual basis for the States and three series giving the distribution of families and individuals by their income size. One of these latter distributions is derived from an annual field survey of a sample of families and individuals by the Bureau of the Census, another is a part of the Survey of Consumer Finances, made annually for the Governors of the Federal Reserve System, also a sample field study, and the third is the most recent development of the Department of Commerce work on national-income statistics.

The Commerce estimate of personal income is generally considered one of our most important measures of economic conditions. It includes only income currently received, both that resulting from commercial transactions and that coming from Government. After deductions of social-security contributions, personal taxes, and similar payments, an estimate of personal income after tax is secured, called "disposable income." Strictly speaking, it is not entirely disposable as between consumption and savings since it includes pay or profit in consumption goods. The inclusion of this imputed income, only about 5 percent of the total, makes the estimate a better indicant of the potential consumption level and, more important, when taken into account upon the consumption side makes the totals of the categories affected, notably food and housing, more accurate than they would be if current outlays alone were noted. But the income truly apportionable between consumption and savings or among alternative types of consumption goods is that which is in money.

Similarly, certain forms of accrued money income until realized are not disposable for consumption but are additions to net worth. The effect of income in kind and of accrued but not realized income upon the propensity to consume is one of the many questions upon which the evidence is not clear. The effect of the latter is possibly similar to the effect of holdings of highly liquid assets. In any case so large is the bulk of the realized or easily realized income in the total disposable personal income that it becomes an important measure of potential demand for goods and, therefore, for production.

The census survey of the incomes of families and individuals in form differs from that which is part of the Survey of Consumer Finances mainly in the size of the sample, that of the census being the larger, and in definition of income-recipient unit. Both secure only money income. The recipient unit in the census survey is either a family defined as two or more related persons residing together or an individual who is not a family member. In the Survey of Consumer Finances an attempt is made to define the economic unit which is a separate and independent recipient and spending unit. Thus some individuals living with relatives may be added to some not so living and groups of related persons living with relatives may be considered a separate family for enumeration. It appears also that a one-person household is counted as a family, although this is by no means made clear or explicit. In the census survey, and presumably in the other also, all the persons and only the persons who are members of the family at the date of the interview report income for the preceding calendar year. Some families, of course, were differently constituted during the report year and some individuals then unattached were family members at an earlier date. The net effect is to increase the units at the lower end of the distribution as does the attempt of the Consumer Finances Survey to isolate all true economic units.

The new series initiated by the National Income Division presents estimates upon the basis of the results of field surveys and the Federal income-tax returns. By the use of the latter source certain forms of income and certain income recipients, especially those at the top of the distribution that tend to escape inclusion in the surveys, are fitted into the distribution. Income in kind is taken into account and the estimates are fully adjusted to the national aggregate after excluding the income of nonprofit institutions, trust, and funds, which for convenience is included with that of persons.

The data on consumer expenditures are scanty and out of date as compared with those on consumer incomes. Yet the meaning of the income figures so far as levels of living and market transactions are concerned can only be derived from parallel consumption data. No study of family or individual consumption by income or other variable on a nationwide scale has been made since 1942, in fact only twice in our history. In general, for consumption data based on household surveys since 1941 we have the results of a Bureau of Labor Statistics study in certain cities and studies of farm families in 5 States at different dates. The data collected by the Bureau of Labor Statistics in 1950, incident to the revision of the Consumers' Price Index, are being tabulated and analyzed under university auspices with foundation aid. No steps have been taken to fill the gap so far as farm or other population groups not covered in this study are concerned.

An estimate of total personal consumption is a part of the gross national product account constructed by the National Income Division of the Department of Commerce. Thus disposable personal income can be allocated between consumption and savings if savings are defined as the difference between the income and expenditure estimates. The quarterly estimates are broken down into services, durable and nondurable goods, and the annual total into a detailed statement by type of commodity or service.

The importance of data on consumer income and expenditures must be judged, of course, by its uses. There are special uses which may necessitate or make desirable the collection of such data. The Bureau of Labor Statistics cannot meet its responsibility for a Consumers' Price Index without inquiries into the spending patterns of the urban population. It was this need which led to the 1918–19 study, the one begun in 1934 and merged into a larger consumer purchase study, and finally to the 1950 survey. The Department of Agriculture points out in its memorandum to the Office of Statistical Standards that a study of expenditures of farm families is overdue if the parity price index they constructed is to reflect postwar spending. Both Agriculture and Commerce place emphasis upon the value of expenditure data to marketing agencies. The National Income Division of the Department of Commerce emphasizes the fact that its series meets special needs of business. There are other special uses of importance but there are also broad, general uses. They might be described as economic information and education, economic study and analysis, and the formulation of economic policy.

It might be said that those are the broad uses of all economic statistics, but it seems to me they specially relate to the data about which I am speaking. They are the data of most surface significance to the general public. It has been interesting to note that almost routinely the data on consumer incomes and expenditures, the sources of which I have been indicating, appear in high school textbooks, are quoted in articles in general periodicals, and similar publications.

Periodic estimates of personal income, its component parts, disposition among types of goods and services, distribution among families and individuals place certain facts in regard to the state of economy and the economic condition of the people beyond dispute. Understanding of economic process is furthered as the relationship and intermeshing of the transactions of households, firms, and Government are made apparent by their summation and expression in quantitative form. The data becomes the material for economic study and analysis with a view to confirming relationships generally accepted and discovering new ones.

This study in turn suggests new hypotheses which guide the collection and treatment of the data. The relation between consumer expenditure and consumer income or other variable, either the total or its allocation among types of goods and services, is by no means established. Even those relationships concerning which the evidence once seemed conclusive are being questioned.

Knowledge of trends over time in consumption and income levels, and in income distribution may well be considered indispensable in appraising economic policy designed to have long-run effects or improve the relative economic position of a population or economic

group. Economic policy is also concerned with the immediate economic situation, the level of production, employment and income as of the moment or the immediate future. Disposable personal income viewed as potential demand for products and services and its probable allocation as between consumption and savings and among types of goods and services, then takes on significance as an indicator of prospective transactions and business activity.

Each use of income and expenditure data sets up its own standards with respect to details shown, variables taken into account, population groups separately shown. Timeliness is important when the data are to be used as indicators of the immediate situation. For other purposes the later data may be no more useful than the less recent. The usefulness of these data for all users is enhanced if the methodology of estimation or collection is adequately discussed with a view to aiding interpretation. The publications of the National Income Division of the Department of Commerce are examples of increasingly good practice in this respect. The report of the income and expenditure study made in 1942 by the Bureau of Labor Statistics and the Bureau of Human Nutrition and Home Economics is a second illustration of the type of disclosure and discussion that is most useful.

The income reports of the census and the survey of consumer finances could be improved in this respect. Neither may consider it desirable to change the definition of income-recipient unit, but the probable effects of the definition upon the distribution should be pointed out. The census could give at least occasionally the number of families whose reported income was affected by the fact that membership during the report year was not the same as at the interview date. The survey could disclose the composition of its two classes of economic units in such a way as to permit comparison with the census recipient units. Estimates of underreporting should be given with probable reasons and results even if no reduction in its volume is possible.

The census series is especially valuable for many purposes because of the information given regarding the personal and family characteristics of the population included. This latter type of information should if anything be increased, especially that which would clarify the composition and economic relationship of the members of the households not headed by a married couple and in all families the relationship to the head of the family of members 18 and over other than wife. Thus further light would be thrown on the question, who supports whom, the period of child dependency, the movement of personal and family income through the life cycle, the composition of the families at the bottom of the distribution and other matters upon which generalizations are made without adequate facts. The census has also recently published a report on the incomes of persons. Such data have uses which the family distribution does not, especially if there are breakdowns by age, sex, occupation, family, and marital status, and if contractual is distinguished from transfer income.

What is needed to strengthen the Commerce estimates of personal income and consumption expenditures is made clear in the reports and in the memorandums submitted to this committee. Since great reliance is placed upon data that are byproducts of the social-security system and the collection of personal income taxes, the problem is how to secure these data quickly and in the most useful form, especially those

found on the income-tax reports. Two components of income are believed to be of especially low reliability, rental income and the income of unincorporated nonfarm business proprietors. There is, therefore, need for a special study of the returns of individuals reporting rental income and an annual tabulation of the reports of the unincorporated nonfarm business proprietors. The Department of Agriculture provides estimates of farm proprietors' income. This agency with good reason emphasizes the need for a new study to bring their data on farm expenses and net farm income up to date.

In the memorandum of statistical needs submitted to the office of Statistical Standards by the National Income Division the gaps in the preparation of detailed estimates of consumption expenditures are said to be too numerous to list. These estimates involve the use of a much greater diversity of sources both public and private than the income estimates. Since consumer purchases are largely business sales the estimates are based in relatively large proportion upon the censuses of manufacture and trade. For the strengthening of these series nothing probably would be more important than the regular taking of the basic censuses supplemented by intercensal surveys based on samples.

In such census taking the special needs for the improvements of the consumption estimates are more commodity detail, for example, retail sales by line of goods carried, and extension of coverage of the service trades. More frequent surveys of family expenditures would also permit strengthening of the estimates at certain weak points. Since so large a part of the estimated total value of services represents not current purchases but the imputed rental value of owned homes and certain other items for which no outlay is made it might be well to show the latter separately in the quarterly estimates.

In the memorandum prepared by the Office of Statistical Standards a periodic survey of incomes, expenditures, savings, debts, and other economic characteristics by family characteristics is listed as a basic statistical tool that is not well developed. Clearly we know far more about the income than the outgo of consumer units and therefore lack knowledge of the relationship between the economic status and other characteristics of the family or its members and the type of goods purchased and the general consumption and savings pattern. Both the Department of Labor and the Department of Agriculture list the need for such surveys for their special needs in performing duties with which they are charged as well as for broader and more general purposes.

There are three comments in the memoranda submitted to the committee that I would especially like to emphasize in this connection. One, from the Office of Statistical Standards, suggests that the need is not necessarily that a single nationwide study be repeated periodically but for an integrated program. Specialized surveys, specialized as to purpose, hypothesis being tested, population group, region, economic class, area of consumption intensively explored, are also important. The second comment is to the effect that special attention should be given to the techniques of conducting such studies, not only sampling designs, but techniques for reducing nonresponses, and substitutions, and for increasing the completeness and accuracy of the

data secured. The results of the tests of the split schedule, the short schedule, the unbalanced schedule should be weighed. Third, and most important, is the point made by Mr. Clague in the letter accompanying his statement of needs, the need for provision for analytical work. His comment was general, but it is especially applicable to this branch of economic statistics. The family expenditure data already collected have never been adequately analyzed in the sense of exploring their relationships, testing hypotheses, gaining insight into consumer behavior. In this process, gaps in the data to be remedied by a new collection would appear.

Unless analytical work on a higher level and larger scale than has hitherto been stimulated and provided for takes place, the data collected will yield only limited returns in economic usefulness.

Representative TALLE. Thank you kindly, Dr. Kyrk.

We turn now to Mr. James Martin, director of the Bureau of Business Research and professor of economics at the University of Kentucky.

Professor Martin.

STATEMENT OF JAMES W. MARTIN, DIRECTOR, BUREAU OF BUSINESS RESEARCH, UNIVERSITY OF KENTUCKY, LEXINGTON, KY.

Mr. MARTIN. Mr. Chairman, members of the committee, it seems to me the committee is to be congratulated on the excellence of the statements submitted by the Council of Economic Advisers and the Bureau of the Budget. The latter in particular seems to give a balanced and judicial estimate of the strength and weaknesses of the statistical program of the United States.

In general, I find myself in accord with the statement by the Bureau of the Budget. The one thing in the statement I should like to emphasize is the shortage of benchmark data as represented by the major accumulations and as illustrated more particularly by the major censuses. More about that subsequently.

I should like to develop my own comments in terms of two basic suggestions, first, about the needs of State and local government, and then, as the meat of the comment, attempting some statement of the general characteristics of a satisfactory Federal statistical program along with some observations respecting the extent to which the Federal Government actually observes these, to me, basic considerations.

Speaking generally, the State and local governments in the aggregate require for their effective policymaking and management many kinds of statistics which are also important to the National Government of the United States and to business enterprise. They need for budgetary purposes, for example, all the sorts of data bearing on the general trend of employment, of business conditions, and of the outlook for the health of the economy which the Federal Government itself requires. They need for various other purposes all of the different varieties of economic statistics that are essential to the management of other large scale business operations and some other data peculiar to themselves.

In the provision of statistical data for the use of State and local governments, especially large-scale local governments, the Federal

Government of the United States provides statistics under its present policies which have all the advantages and limitations those data now have for the purposes of the National Government along with numerous geographical limitations in addition. Indeed one of the basic problems in using the statistical output of various Government agencies of the United States for the purposes of State, county, and city governments is the considerable difficulty due to the fact that the data are not geographically broken down. I shall have more to say about this point in a different connection.

In general the needs of States, counties, cities, and other local units of government are subject to the same basic requirements as to concepts, as to statistical accuracy, as to prompt timing, as to method of collection, and as to the procedures incident to data production as are other statistical users, such as those who are testifying here yesterday and today. The sound observations of other witnesses on this occasion, therefore, are, by and large, applicable to State and local government as a consumer of Federal Government statistics.

My remaining attempt to make a general series of observations about the characteristics of a sound statistical program and to focus on the needs of State and local government will not be specialized in that direction but will be general in character. You will, I hope, permit me, however, to draw most of my illustrations from specific needs of State and local government and of agencies, such as State universities, which are in large part attempting to assist the State and local governments in the adequacy of their performance in behalf of the general public.

One criterion of the soundness of a statistical program is that there should be suitable balance between those statistics which are essentially current in character and those which are in the nature of benchmark data. The current data should of course measure productivity, employment, prices, finances of business and of Government, and other economic quantities and should do so on a reasonably prompt, immediate basis. This much is essential to both governmental and private purposes. Both the statistics presenting the current measurements of economic activities and quantities and data of other sorts are dependent upon the statistical accumulations which I refer to as benchmark statistics, and which I will illustrate by the Federal censuses.

Let me quote a paragraph from Appraisal of Census Programs, a recent report made to the Secretary of Commerce.

> The single most comprehensive economic measure we have today is the edifice of figures making up gross national product, or the estimated sum-total of the value of all goods and services produced by the economy. That measure of the functioning of our economy is watched intently by Government officials and by the scores of thousands of people in our business enterprise and farm economy who must be continually alert to changes in economic conditions. That edifice, representing one of the great advances in the history of economic measurement and analysis, could never have been constructed without the benchmark figures secured from census enumerations. This dependence has been strongly emphasized by many of those who appeared before this committee. Even more strongly they have emphasized that further neglect of the congressionally authorized census programs may reduce this gross national produce edifice to a hollow shell. At best that edifice of figures must be painstakingly built up from one set of estimates to another; and the farther we get from the solid bricks and stone and timber and steel of comprehensive census enumerations. the more fragile and uncertain our working materials become.

In connection with the observations made here and the other observations, I call attention to the chart which has been mounted on the blackboard and which is borrowed from this report with some adaptations. On the progress of census programs, note particularly that the chart shows a continuing and healthy growth in the concept of the major statistical program of the United States for 150 years, but that that growth has continued for the remaining dozen or 15 years; and, although Congress has continued to authorize a constructive program of major censuses, when the time came for appropriations, as the goose eggs show, the appropriations were not forthcoming, and the censuses were not made. You will pardon the expression. I couldn't think of a good word other than "goose eggs," but it does not mean a goose egg as far as the major censuses are concerned for this decade.

If you look at the righthand part of the chart, the chart shows a remarkably consistent growth in the concept of what the major statistical benchmark data ought to be, but with some failure so far as the actual execution of the program is concerned.

If we look particularly at the Bureau of the Census, Division of Governments, which performs a service that is not only important to State and local governments but is also important to the National Government, as has been frequently noted in the testimony of other witnesses, the entire program of this Division can be improved greatly by certain minor changes in the statutes and by continuing, and consistent congressional support for, the conduct of the modest program authorized. It has been officially estimated that the cost of the work could be reduced by about $1 million for each decade and that the division can still do a better job, such as is outlined on page 13 of the report of the Intensive Review Committee to the Secretary of Commerce on the appraisal of census programs. That committee makes the following specific recommendations, in which, with minor exceptions, I find myself in accord:

1. That a complete census of governments should be undertaken in 1956 to cover the year 1955 and in each tenth year thereafter. This would establish new benchmarks and provide vital information that has not been available since 1942 and not on an effective basis since 1932. The cost would be in the neighborhood of $2 million.

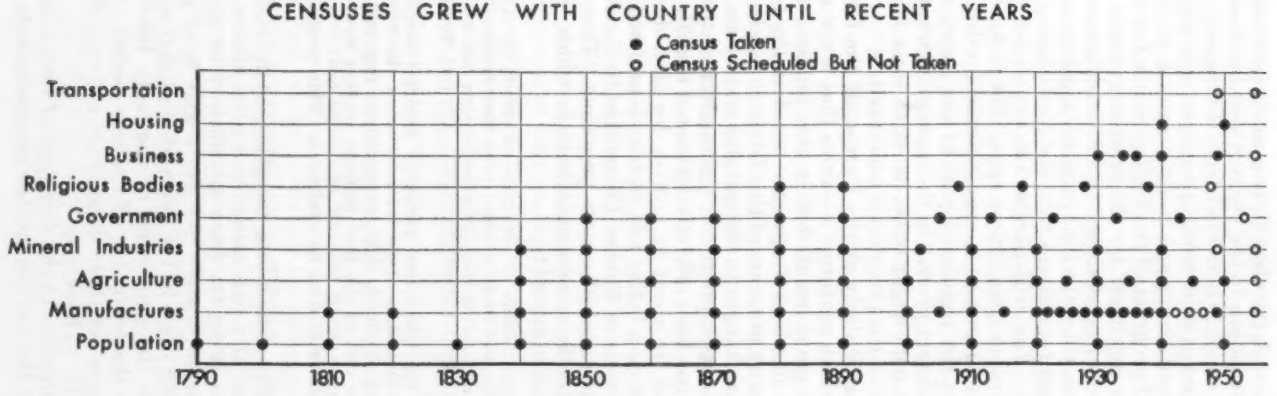
2. That during the intercensal period, a biennial sampling survey be conducted to provide up-to-date trend information of the State and metropolitan area totals for tax revenues, debt, expenditures and employment, and other related facts. The cost of the four biennial surveys would be about $500,000.

3. That the present census program of limited quarterly and annual reporting of governmental statistics be continued. This program now costs about $230,000 a year.

I said there were some minor exceptions to my complete accord with that, and I especially call attention to the census of 1932 which I should regard as being far from satisfactory on several counts.

It happens unfortunately for State and local governments that the census of 1922 came in the depression of that era, that the census of 1932 came in the depression of the early 1930's, and the census of 1942 came at the beginning of the war period. So all the benchmark data we have for three decades are not typical and, for the last decade and a half, we have none.

Also, I call attention to the fact that, if such a statistical program as the Intensive Review Committee recommends to the Secretary of


CENSUSES GREW WITH COUNTRY UNTIL RECENT YEARS
● Census Taken
○ Census Scheduled But Not Taken
Transportation
Housing
Business
Religious Bodies
Government
Mineral Industries
Agriculture
Manufactures
Population
1790
1810
1830
1850
1870
1890
1910
1930
1950

Commerce were authorized by the Congress and consistently provided for by congressional appropriations, the net result would doubtless be local research and comparisons which in the long run might very well improve the information-gathering sources and thereby reduce the cost to the United States of conducting the census. This improvement and consequent cost reduction has occurred already to a considerable extent. Studies of methods and programs for statistics accumulated locally, which would reduce the cost of the National Government, doubtless will continue to occur. It could be facilitated by Federal action.

In my opinion, the statistical program of the Federal Government is currently suffering from a lack of balance between the current and the benchmark statistics. Not only is that the case, but I agree with the Intensive Review Committee's implication that the best way to aid toward improvement of current statistics is to provide for a resumption and for the maintenance of the legally authorized program for gathering comprehensive facts on the American economy. Even some of the major accumulations and analyses of data, which might be regarded as benchmark figures—for instance, the Department of Commerce annual estimates of income payments and the Federal Reserve estimates of consumer expenditures—depend on other basic collections such as census figures. These major collections in turn are relied on for the production of current data. The latter obviously are weakened by the antiquity of census data and by the further limitations of the major periodic collections.

State and local Government programs are hampered by the lack of balance between benchmark and current data just as are those of other users of statistics.

To go on rapidly to a second and third and fourth consideration, I should like to mention, second, the data-gathering program of the United States should be so conducted as to have continuity of definitions and of general contents. The method should be sufficiently similar to make the data reasonably comparable.

Third, another characteristic of a thoroughly satisfactory statistical program for the United States is that that program shall be as localized as the circumstances, including financial support, permit.

This is peculiarly important to State and local governments because even regional data in many instances would be exceedingly helpful to State and local governments where today we have only national statistics. Of course, I am now referring primarily to current data.

A fourth factor in a satisfactory statistical program on which I would place heavy emphasis has already been suggested from time to time incident to other comments. I refer specifically to the desirability of consistent congressional support of whatever program of statistical improvement the Congress may agree on. It is certainly poor economy to devise an economical program and then kill off the program in the midst of the effort to implement it, either by failure to make financial provision or by erratic procedures which, in effect, delay making financial provision until the program becomes obsolete and the data produced not of maximum usefulness. If this committee can devise some means for bringing an awareness to Congressmen of the wastefulness of failure to support its own program on a

timely basis, the committee will have accomplished an enormously important service to the people of the United States, statisticians, and to the Congress itself.

(The complete statement submitted by Mr. Martin follows:)

THE FEDERAL STATISTICAL PROGRAM WITH SPECIAL REFERENCE TO THE NEEDS OF STATE AND LOCAL GOVERNMENTS

(By James W. Martin, Director, Bureau of Business Research, University of Kentucky)

The memoranda prepared by the Bureau of the Budget and the President's Council of Economic Advisers came too late, in the light of prior commitments, for me to comment at length on their content. It is of some interest, however, to find my own position seemingly in keeping with that of the former on what we both regard as the paramount need for corrective action; namely, that the Congress should carry out its schedule for provision of basic benchmark statistics, particularly those made available through periodic censuses. I agree, too, as to the particular urgency of the several censuses which the Bureau of the Budget expressly mentions in this connection. As will be more obvious as I proceed, I think that, of the omitted censuses, the census of governments is the one which would yield the most product per dollar spent. The Bureau does not mention it in this connection, presumably because it is a small-scale undertaking.

What I have to say about the general character of a defensible Federal statistical program will have little significance because my comment will be about the same as any other student of public affairs would offer—but of course with differing emphasis. Briefly, I think such a program should include whatever statistical information is essential to the public interest. This doubtless involves (*a*) comprehensive service directly to national Government agencies, (*b*) service to the States and their local subdivisions and institutions, (*c*) service to other public and quasi-public institutions and agencies such as banks, business associations, and the great research centers, private universities included, and (*d*) service to distinctly private businesses to the extent that their particular interests are sufficiently widespread as to justify the identification of those interests with the well-being of the general public. All these points are perhaps clear enough except possibly the last. As to that, one might suggest by way of illustration that the needs of large-scale marketing ought to be, and are, contemplated in the various censuses of distribution, of manufacturing, of population, and so on. On the other hand, a particular problem of finding statistical evidence as to motor vehicle buyers' automobile style preferences which would give a manufacturer as to what he should produce, ought perhaps to be left to that manufacturer.

The specific program for the production of economic statistics should, of course, be one which is adjusted from time to time to the changes in general conditions. To put the matter another way, it would seem quite clear that, as economic conditions change, the need for statistical data are altered, and the program of the National Government ought to be adjusted accordingly.

Speaking particularly with respect to the kind of adjustments in the existing national program which would be of greatest assistance to State and local governments and which at the same time would assist other users of the data, perhaps I may have something more fruitful to suggest. At any rate I have a notion that there are more debatable issues in respect of this area of the committee's inquiry than in respect of the fundamental general concept of an overall economical and otherwise desirable statistics program which would be suitable for the Federal Government of the United States. I should like to develop basic suggestions (*a*) by saying a word about the needs of State and local government and then (*b*) as the main body of my comment by attempting a general statement of some of the characteristics of a satisfactory program along with some observations on the extent to which the Federal Government production of statistical data at the present time appears to be satisfactory or unsatisfactory in terms of these basic concepts.

Speaking generally the State and local governments in the aggregate require for their effective policymaking and management many kinds of statistics which are also important to the National Government of the United States and to business enterprise. They need for budgetary purposes, for example, all the sorts of data bearing on the general trend of employment, of business conditions, and

of the outlook for the health of the economy which the Federal Government itself requires. They need for various other purposes all of the different varieties of economic statistics that are essential to the management of other large-scale business operations and some other data peculiar to themselves.

In the provision of statistical data for the use of State and local governments, especially large-scale local governments, the Federal Government of the United States provides statistics under its present policies which have all the advantages and limitations those data now have for the purposes of the National Government along with numerous geographical limitations in addition. Indeed one of the basic problems in using the statistical output of various Government agencies of the United States for the purposes of State, county, and city governments is the considerable difficulty due to the fact that the data are not geographically broken down. I shall have more to say about this issue in another connection.

In general the needs of States, counties, cities, and other local units of government are subject to the same basic requirements as to concepts, as to statistical accuracy, as to prompt timing, as to method of collection, and as to the procedures incident to data production as are other statistical users, such as those who are testifying here yesterday and today. The sound observations of other witnesses on this occasion, therefore, are, by and large, applicable to State and local government.

My remaining attempt to make a general series of observations about the characteristics of a sound statistical program and to focus on the needs of State and local government will not be specialized in that direction but will be general in character. You will, I hope permit me, however, to draw most of my illustrations from specific needs of State and local government and of agencies, such as State universities, which are in large part attempting to assist the State and local governments in the adequacy of their performance in behalf of the general public.

One criterion of the soundness of a statistical program is that there should be suitable balance between those statistics which are essentially current in character and those who are in the nature of benchmark data. The current data should of course measure productivity, employment, prices, finances of business and of government, and other economic quantities and should do so on a prompt, immediate basis. This much is essential to both governmental and private purposes. Both the statistics presenting the current measurements of economic activities and quantities and data of other sorts are dependent upon the statistical accumulations which I refer to as benchmark statistics. On this point, please permit me to quote a paragraph from pages 63 and 64 of the recent Appraisal of Census Programs by the Intensive Review Committee:

"The single most comprehensive economic measure we have today is the edifice of figures making up gross national product, or the estimated sum total of the value of all goods and services produced by the economy. That measure of the functioning of our economy is watched intently by Government officials and by the scores of thousands of people in our business enterprise and farm economy who must be continually alert to changes in economic conditions. That edifice, representing one of the great advances in the history of economic measurement and analysis, could never have been constructed without the benchmark figures secured from census enumerations. This dependence has been strongly emphasized by many of those who appeared before this committee. Even more strongly they have emphasized that further neglect of the congressionally authorized census programs may reduce this gross national product edifice to a hollow shell. At best that edifice of figures must be painstakingly built up from one set of estimates to another; and the farther we get from the solid bricks and stone and timber and steel of comprehensive census enumerations, the more fragile and uncertain our working materials become."

The State and local governments and research institutions in their behalf frequently make studies and other tests looking toward more comprehensive planning of their fiscal and general economic affairs than is suggested by mere direct comparison of data. These studies, of course, cannot be made on a comparable basis when the benchmark statistics are not available at all. At present such census data are not to be had in view of the fact that the last census of governments, comprehending all local as well as all State governments was made in 1942 and the censuses of wholesaling, retailing, manufacturing, and minerals so long ago as to be of little current significance.

In many instances such studies are definitely planned in advance in reliance upon the regularity of the United States Bureau of the Census acting under a definite statute and in the instance of the census of governments particularly in reliance upon the tradition that such a census is to be made the second year of each decade as has been done regularly in this century until 1952, when the appropriation for the conduct of the comprehensive survey was denied. Systematic studies of State and local fiscal problems, to my knowledge, were definitely planned and a good deal of work went into the planning; but these studies had to be dropped with complete loss of the work which had been done because of the fact that the comprehensive census of governments which was required by statute was actually omitted. The probability of really serious financial loss from such practice is not great, but the considerable embarrassment to the planning of orderly studies and the fundamental mistake involved in failure to maintain the legally prescribed censuses at the times the law definitely prescribes are, in my opinion, extremely unfortunate.

Of course numerous special studies needed to maintain the accuracy and dependability of statistics in current State series depends on checking the current data with periodic census detail, periodic analyses of Federal income-tax return statistics, and occasionally major benchmark figures of other sorts. One example that is particularly important to the work of this committee is the data with respect to national income and related concepts which, although produced monthly, are thoroughly dependent upon the annual statistics which the Department of Commerce assembles each year. These annual data in turn depend on such benchmark figures as those gathered by the Bureau of the Census.

So far as the statistics with which I am most intimately acquainted are concerned, it appears highly possible that the weaknesses in National Government economic statistics at the present time are very heavily indeed in the area of the bench-mark statistics rather than in the area of more directly usable current data. The explanation of this is not hard to find. It is extremely difficult for legislators or for citizens who use the information only second hand to become solicitous about figures which from their viewpoints are 2 or 3 steps removed from practical usability.

At any rate, as indicated, there is a fundamental question from the viewpoint of State and local government—as well as from other angles—as to whether the development of bench-mark data is keeping pace with current series.

To take the census of governments as a specific example you will recall that from time to time the census has been taken as of the second year of the decade or thereabouts. There was a general census in 1922, another in 1931 and 1932, another in 1942, and subsequently the Congress provided that such a comprehensive examination of State and local government statistics should be made each 5 years beginning with 1952, 10 years after the last decennial census year. The Congress made limited appropriations for preparing for this census, but when the time came for the comprehensive work which would be necessary to a completion of the job, the appropriation was not forthcoming. Thus, the State and local governments were denied the comparable figures which are available only from this source. Incidentally, failure of the appropriation meant that the Federal Government of the United States largely wasted the money which had already been devoted to this purpose. As a matter of actual fact, however, some of the data were salvaged; and valuable publications have resulted through the alertness and initiative of the Bureau of the Census and in spite of the unfortunate handling of appropriations for the purpose.

Perhaps it should be pointed out that these census of Government's figures are peculiarly essential, not only to the work of the United States Government through such agencies as the Bureau of the Budget and the Council of Economic Advisers, but more particularly to the State and local governments which have no other means whatever of making intelligent interstate comparisons of public finance experience. The individual States quite properly produce statistics, if they do, according to their own plans. These data are usually noncomparable with the figures respecting similar subject matter produced by other States, and data for local governments are sometimes noncomparable with figures for other local governments of the same kind within the same State. This, too, is perhaps one of the expressions of local autonomy which this committee would favor and certainly one which many other people in this country support vigorously.

The net result of this situation is that the immediate comparisons for budgetary, tax policy, debt policy, and other purposes which the State authorities and the local officials would like to draw cannot be drawn in terms even of intelligent estimates because the fundamental bench-mark data have not been accumulated on a comparable basis for any date since 1942—a year too far in the past to be of much assistance. That particular year, moreover, was one of wartime and preparation for war, a fact which renders the figures noncomparable with the data for subsequent years, at least for those after the close of the war in 1945.

What can be done about the major problem of bringing benchmark data up to date? In part the problem is one of more financial provision for gathering basic data; in part it is one of replanning in the light of recent improvements in sampling methods. Again, I should like to offer an example involving the census of governments. That National Government small-scale task is perhaps of all the statistical collections the one Federal source of information which is of most outstanding significance to State and local governments, and the justification of which is largely the fact that this census is peculiarly essential to State and local policymaking and administration.

The entire program of the Bureau of the Census Division of Governments can be improved greatly by certain minor changes in the statutes and by continuing and consistent congressional support for the conduct of the modest program authorized. It has been officially estimated that the cost of the work could be reduced by about $1 million for each decade and that division can still do a better job such as is outlined on page 13 of the report of the Intensive Review Committee to the Secretary of Commerce on the Appraisal of Census Programs. That committee makes the following specific recommendations:

"1. That a complete census of governments should be undertaken in 1956 to cover the year 1955 and in each 10th year thereafter. This would establish new benchmarks and provide vital information that has not been available since 1942 and not on an effective basis since 1932. The cost would be in the neighborhood of $2 million.

"2. That during the intercensal period, a biennial sampling survey be conducted to provide up-to-date trend information of the State and metropolitan area totals for tax revenues, debt, expenditures and employment, and other related facts. The cost of the 4 biennial surveys would be about $500,000.

"3. That the present census program of limited quarterly and annual reporting of governmental statistics be continued. This program now costs about $230,000 a year."

With exceptions, I agree entirely with this committee report. The major exception is that I do not regard the report of the census for 1932 as being a particularly satisfactory one. Also, I call attention to the fact that, if such a statistical program as the Intensive Review Committee recommends to the Secretary of Commerce were authorized by the Congress and consistently provided for by congressional appropriations, the net result would doubtless be local research and comparisons which in the long run might very well improve the information-gathering sources and thereby reduce the cost to the United States of conducting the census. This improvement and consequent cost reduction has occurred already to a considerable extent. It undoubtedly will continue in any event to some additional extent, but the provision of census data and the pressure of census inquiries would as a long-range matter assist in the marked improvement which is already in process.

Again permit me to quote from pages 64–68 of Appraisal of Census Programs.

"SCHOLARS AND SCIENTISTS

"Notable among the users of census benchmark records are the scholars, social scientists, and physical scientists in our universities, in our public and quasi-public research organizations, in the research organizations and departments maintained by many business concerns and associations, and among the thousands of research workers whose research is financed by our philanthropic foundations. Even the most practical-minded must regard this network of fundamental research, as well as the farseeing administration, management, and philanthropy that have made it possible, as one of the conspicuous achievements of our civilization.

"In the final analysis our civilization is dependent on fundamental research, which continually pushes forward the frontiers of knowledge, guides our thinking, sets the tone for our society, and in a fundamental sense drives us onward from goal to goal.

"It is scarcely possible to exaggerate the depth and pervasiveness of the influence of fundamental research in the fields in which the benchmark records of the Bureau supply the raw materials. This great volume of research by thousands of scholars, scientists, and analysis has profoundly influenced the shaping of the framework of our present-day civilization—the ever-changing framework within which both public policy and private policy operate to further both stability and growth.

"BUSINESS USERS

"In this catalog of users of census material, we must give special mention to the thousands of analysts, researchers, advertising managers, sales managers, business consultants, trade association executives, and plain businessmen in our business enterprise system who look to the census record on national, regional, State, county, city, cenus-tract, and city-block industries and businesses in their search for markets; and who look similarly at the summary and detailed records on population, agriculture, housing, foreign trade, mineral industries, State and local governments, and all the gamut of census figures. Apart from the analysts and researchers, perhaps most of these users never look inside a formidable census volume. But they are users nonetheless, for those records have been extracted for them by someone within their companies or outside; and they are each day making decisions based on this wealth of census facts and figures. Perhaps the presidents of most large corporations do not realize their dependence on census records—but somebody down the line does. * * *

"DISTURBING RETROGRESSION

"* * * As stated at the beginning of this report, the 80th Congress in 1948 reviewed the programs of the Bureau and enacted into law (Public Law 671) authority for a carefully planned and staggered program of quinquennial economic censuses—manufactures; retail, wholesale, and service trades; mineral industries; and transportation. That program was the product of decades of experience in census planning and was formulated with the advice of numerous advisory committees of informed users and suppliers of census figures.

"That legislation was a notable milestone in the history of census planning, which goes back to 1790, and was widely hailed as a significant forward step. The 81st Congress in 1949 and 1950 rounded out this planning by authorizing a decennial census of housing and a quinquennial census of governments. These and other laws provided for a businesslike scheduling of censuses over the period of a decade, in the interest of more efficient utilization of Bureau staff and equipment and in the interest of avoidance of the wastes and inefficiencies that had attended the undue bunching of too many censuses at the decennial year.

"So much, so good, for authority. But what has happened in terms of the vital step of appropriations? The first of these carefully planned and rescheduled censuses to come up for budgetary consideration after 1948 was the census of governments, first taken in 1850, and scheduled to be taken this time early in 1953 on 1952 figures, and each fifth year thereafter. Great care had gone into the planning of that census by an advisory committee of outside experts and the Bureau staff. Despite the fact that the last good census of that type had been conducted for 1932 at the bottom of the great depression (the 1942 census having been seriously deficient because of unavoidable wartime reasons), funds were denied.

"The second census to come up for appropriations was the historic census of manufacturers, first taken in 1810 and scheduled this time to be taken early in 1954 on 1953 figures, and each fifth year thereafter. This census had been on a 5-year basis from 1904 to 1919 and on a biennial basis thereafter, except that those planned for 1941, 1943, and 1945 had not been taken because of wartime conditions. It was taken last for 1947. Many outside advisers and users of the census had very reluctantly concurred in the recommendation for shifting back to a 5-year census, being loath to give up the biennial schedule because of the tremendous changes that were known to be going on in the field of manufacturing. Only very limited 'spotcheck' funds were provided. Now, strong complaints are being voiced by those who reluctantly concurred in the recommendation to drop the biennial schedule, and they ask whether the meaning is that we are

to retrogress to only a decennial census of manufactures, or back to the 19th century schedule.

"The third census to come up was the census of business (retail, wholesale, and service trades), first taken in 1930 and this time scheduled for early 1954 on 1953 figures, and each fifth year thereafter. Again, only limited 'spotcheck' funds were provided.

"The fourth was the census of mineral industries, first taken in 1840, last taken for 1939, and this time scheduled to be taken early in 1954 on 1953 information, and each fifth year thereafter. Again, funds were not provided.

"The next census under review was the census of agriculture, first taken in 1840, conducted at 5-year intervals since 1920, and scheduled this time for 1954. This large and comprehensive census of our more than 5 million farms is the basis for much of the current crop and livestock estimating and other work of the Department of Agriculture. In accordance with past practices, funds were requested for fiscal year 1954 for the essential preparatory work. No such funds were appropriated, only limited amounts being provided for current 'spotcheck' work.

"The foreign trade statistics program is a partial victim of this same retrenchment policy, as noted elsewhere in this report. This program, dating back to 1790 and embracing the collection of data from the Customs Service and the publication of detailed monthly and annual figures, has been progressively starved over the past 8 years, to the detriment of our foreign traders, Government agencies, and analysts; and to the embarrassment of the world's chief trading Nation.

"What all of this story of retrenchment adds up to is not a pretty record, and strenuous efforts will be required if the damage done is to be repaired."

It is perhaps superfluous for me to say that, in my opinion, the statistical program of the Federal Government is currently suffering from a lack of balance between the current and the benchmark statistics. Not only is that the case, but I agree with the Intensive Review Committee's implication that the best way to aid toward improvement of current statistics is to provide for a resumption and for the maintenance of the legally authorized program for gathering comprehensive facts on the American economy. Even some of the major accumulations and analyses of data, which might be regarded as benchmark figures (for instance, the Department of Commerce annual estimates of income payments and the Federal Reserve estimates of consumer expenditures), depend on other basic collections such as census figures. These major collections in turn are relied on for the production of current data. The latter obviously are weakened by the antiquity of census data and by the further limitations of the major periodic collections.

State and local government programs are hampered by the lack of balance between benchmark and current data just as are those of other users of statistics.

In the second place, the data-gathering program of the United States should be so conducted as to have continuity of definitions and of general content. In many instances, this has been the case in existing National Government statistical programs. Indeed the Bureau of Labor Statistics, to give only one example, appears regularly to provide comparable data for prior years and in appropriate cases even by months of several preceding years when a new statistical base is defined because of the necessity for keeping current in fundamental concept. This, it would seem, is entirely essential if the requirements of State and particularly of local governments are to be met by the National Government statistics. You will appreciate that a minor change of definition may be of negligible significance for the Federal Government of the United States because these minor differences really are of such character in many, perhaps most, instances that the net result of the changes is more or less compensating in character. This is not the case with respect to States, and it is particularly untrue with respect to local governments because circumstances in particular localities are often such that all the facts reflect upward, or, on other occasions, downward, bias, so the alteration of a definition may very well make a very substantial difference in the totals which are shown for the locality in, for example, a census of manufacturing, of distribution, or of population. Examples of such confusion to State and local governments are frequently found in the changes effected in census definitions. The basic concepts are altered to a minor extent to save money, to secure greater efficiency, or for some other persuasive reason; and the net result is a degree of noncomparability which becomes greater and greater as the size of the area contemplated becomes smaller and smaller. The

net consequence is a seriously upsetting arrangement for State and local governments, as well as for localized businesses of one sort or another, which depend upon the census data for period-to-period comparisons.

In this connection one of the explanations given is the fact that the data are adapted to conform more exactly with differing institutions from one place to another, some of which are distinctly those of local government. This, it would seem, is really a rather inadequate justification for such changes because a fundamental basis for a National Government statistical program is that of finding a way of making certain kinds of data comparable in a situation that is actually noncomparable from the point of view of local institutions. The kind of government a city has, for example, ought to be no reason why the financial data should be reported for general use differently for that city from the reports made of a city with quite another sort of local government organization. True enough, the local statistics will usually be different. The reason for having National Government statistics of local finances, for instance, is exactly the desirability of comparable data notwithstanding noncomparable situations.

Other aspects of uniformity are also important. In census work there is a difference between collection of data by mail inquiry and doing the same work with the aid of trained enumerators. Yet some censuses are conducted in one manner; others of the same sort, in another. The user of the data may well assume comparability when there is none. Another diversity that embarrasses efficient use of Federal statistics stems from the failure to follow in all Government statistical agencies a uniform classification of businesses. There should, it appears, be more emphasis on an approach to general use of the standard code. Another expression of the same sort of failure relates to other elements of nonunity among various agencies. For example, the Bureau of the Census would assume that minor college students are part of the population where the college is located. The Office of Business Economics would place them at the residence of their parents. To take only one other hiatus among Department of Commerce agencies, a year for a State is a calendar year for the Bureau of Public Roads; it is a fiscal year (of the State itself) for the Bureau of the Census.

A third characteristic of a thoroughly satisfactory statistical program is that that program shall be as localized as the circumstances, including financial support, permit. It seems that Congress can well afford to take seriously the problem of providing a real boon to State and local governments by providing more and more statistical information which is so localized that individual States, and in some circumstances individual local governments, can find data for the single community without combining the figures with other statistics for the entire United States and without sacrificing comparability with figures for other communities. Especially is it important to use the so-called benchmark data in the modernization of certain particular series of data for individual governments. Among the series for which this is peculiarly significant are the statistics with respect to the financial activities of State and local governments themselves, which the Bureau of the Census reports from time to time.

A fourth factor in a satisfactory statistical program on which I would place heavy emphasis has already been suggested from time to time incident to other comments. I refer specifically to the desirability of consistent congressional support of whatever program of statistical improvement the Congress may agree on. It is certainly poor economy to devise an economical program and then kill off the program in the midst of the effort to implement it by failure to make financial provision or by erratic procedures which in effect delays making financial provision until the program becomes obsolete and the data produced not of maximum usefulness. If this committee can devise some means for bringing an awareness to Congressmen of the wastefulness of failure to support its own program on a timely basis, the committee will have accomplished an enormously important service to the people of the United States and to the Congress itself.

Representative TALLE. Thank you very much, Professor Martin. At this point the Chair suggests that we hear one more panel member this morning. We can do that and still have a half hour for discussion.

That will relieve the afternoon program and I fancy that at the close of the afternoon there may be even more ideas to consider than there are now. So without objection we will proceed to hear Dr. Isador Lubin, long associated with the Bureau of Labor Statistics.

Dr. Lubin.

STATEMENT OF ISADOR LUBIN, ECONOMIST CONSULTANT, CHAIRMAN OF EXECUTIVE COMMITTEE, FRANKLIN D. ROOSEVELT FOUNDATION, NEW YORK, N. Y.

Mr. LUBIN. I would like to discuss first the broad area of labor statistics and the use of particular types of labor statistics in making policy decisions both by government and by industry.

I want to first point out several shortcomings and weaknesses in our unemployment statistics. There seems to be a very definite need for unemployment estimates by areas, and by the word "areas" I mean both industrial and geographic areas; namely, by types of products that were made by people who are unemployed and place of employment in terms of States, metropolitan areas, and agricultural areas.

We need a more detailed picture of the characteristics of unemployment if we are going to cope with unemployment. We have to know something about these people out of work. Are the unemployed made up mostly of recent high-school graduates? Are they heads of families who have been unemployed for weeks or months? Is unemployment widespread or is it concentrated in particular areas like the anthracite area in Pennsylvania? In 1952, when we had booming industrial conditions and actual shortages of labor, we found significant unemployment in the textile areas of New England.

In other words, if we are going to do something about unemployment we should know where the unemployed come from, that is, what industries laid them off. Were they in trade, in transportation, or in mining?

We also need to know what geographic areas the unemployed are located in, and we should have information on the kind of jobs the unemployed had. Were they skilled workers? Were they unskilled workers?

Incidentally, while talking about unemployment in specific industries, it is rather significant that during all of the heated discussion which has taken place in the last month or two about tariffs in the United States, we have had a very inadequate fraction of the necessary statistical information concerning the relation between tariffs and employment in particular industries. The Department of Labor has supplied figures to show that something like 4 million people depend upon foreign trade in one way or another for their jobs, but the Department has never been able to furnish comprehensive data on the numbers of workers who were protected by tariffs or who would be subject to readjustment if tariffs were changed. We have no data on the location of people who will be affected by tariff changes, the skills of these people, the ease with which these people could transfer out of their jobs to other jobs, as indicated by transferability of skills, or whether the areas where the jobs are located are areas of expanding employment and expanding business activities where they could find other jobs. Nor do we have data on the reverse situation, that is, how many would have to be moved out of an area if their industry was adversely affected by a change in tariffs.

In the absence of reliable data, the field has largely been given over to the estimates of those who are strong advocates of one or another tariff policy. When tariff policy is discussed—and the issue will come up again next year—we hear wild allegations based on widespread

fears of the displacement that might occur if tariff barriers were further to be let down. Spokesmen for the protected industries have recently talked of hundreds of thousands of workers already displaced by tariff cuts and of millions subject to displacement should tariff protection be further lowered.

There have been the beginnings of some real estimating, however. The Bell report on foreign trade policy, which was submitted a year and a half ago, indicated that if its recommendations were adopted less than a hundred thousand workers would be displaced. Although optimistic about the ease with which these workers might transfer to other jobs, its authors thought the situation uncertain enough to call for some governmental machinery to aid workers and management in the adjustment process.

During the brief months of the Randall Commission's activity, more work has been done in this matter than ever before in the history of United States tariff investigations. Starting from the work done by Howard Piquet, in his book Aid, Trade, and the Tariff, the Bureau of Labor Statistics of the Department of Labor estimated the number of workers who would be required to produce the goods equivalent to Piquet's estimates of labor displacement as a result of import increases if tariffs were temporarily suspended.

I believe these figures were the subject of a panel discussion before this committee, in which Mr. Piquet and Mr. Cope, of the Randall Commission staff, participated.

Yet these estimates, important as they were, were only overall estimates, with some very broad breakdowns by industry. No detailed estimates were produced showing the effect on skills or on labor-market areas or relating to the transferability of the workers who might be affected by tariff changes.

Equally unavailable are data showing the employment effects and human-adjustment problems of changes in our *export* levels. It is important to know what the effect of a drop in automobile or tractor exports as a result of United States foreign economic policy would have on employment or workers in those industries. It is certainly as important as knowing what the effect of tariff reductions would be on employment in protected industries.

One major technical reason why employment data have not been available for tariff analysis is that tariff analysis must proceed on a commodity basis, while presently gathered employment data are available only on an industry basis, combining many commodities with vastly different tariff status. For example, the only employment and production data routinely available for the glass industry combine the gigantic container firms who face no competitive problems and the smaller hand-blown glass firms which are highly protected.

In the limited studies of employment and production made for tariff purposes, it has been necessary to make original investigations or special tabulations based on lists of firms producing the special commodities in question. Present agency programs make no provision for such special analyses, which require special techniques and are time consuming.

It is interesting to note, Mr. Chairman, that the Department of Commerce has pointed out the need for the preparation of comparable commodity data for United States exports and imports and produc-

tion. We must have those data, if we are to measure the impact of tariff policy. While discussing foreign trade, may I refer you to a statement issued recently by a committee that was appointed by Secretary Weeks to survey the work of the Census Bureau. If I may, Mr. Chairman, I would like to quote one sentence from the report of that committee. Incidentally, it was made up of representatives of industry and labor and the general public. The committee said:

> A bureau's foreign trade statistics program has been subjected to continual attrition and erosion over the past 8 years, and a condition approaching crisis has been reached. Funds have been successively reduced while the workload has increased. The result has been successive abandonment of sections of the program and lowering of standards of quality and comprehensiveness.

I think that this committee should give careful consideration to the improvements that the Bureau of the Census feels are necessary, particularly those dealing with monthly and annual shipping statistics. At present, monthly shipping statistics are available for reference use only in coded form and are not available for general distribution. The result is that port authorities, steamship companies, Government agencies, and others interested in United States foreign trade have no readily available source of data on which to base their plans.

The Census Bureau has also recommended the preparation of a detailed list of items included in the import commodity classification schedule. I think that it is significant to note that such a list is available now only for the export classification.

Reference has already been made to the need for the preparation of foreign trade statistics in conformity with United Nations recommendations for uniform definitions of value, country, and so forth. I feel very definitely that the United States statistics should be compiled in such a way as to make them comparable with the foreign-trade statistics of other countries.

If I may summarize, Mr. Chairman, if we are to consider the impact of the tariff policy seriously, we must know a great deal more than we do now about the magnitude and the real employment incidence of possible tariff changes. Studies which have been made to date in connection with tariff matters on particular commodities are largely studies in terms of production impact and not in terms of employment impact.

Rarely has there been any examination in terms of what really happens to the workers who are affected by tariff changes. If we are to have information rather than the wild allegations that are common to tariff discussions, and if we are to be in a position to make intelligent decisions regarding future tariff policy, we must know the facts.

I would propose that regular work be done on the extent and character of the employment that is now protected by American tariffs and on the adjustment problems that would be faced by the workers involved should any tariff barriers be removed.

This will require, as I have already said, employment statistics on a commodity and area basis. Study of the adjustments that have been made, and detailed labor market assessment of the adjustments that might be faced if tariffs were lowered drastically, could probably best be done on a case basis. Such statistics and studies could also throw light on the bearing of employment changes resulting from tariff policy on the maintenance of full employment.

Another matter that I feel should be mentioned was brought up yesterday by Mr. Burns, namely, the wide statistical gap in certain wage areas.

As Mr. Burns pointed out, information on wages ordinarily covers only the total amount of the payroll which is put into a worker's pay envelope. The current statistics take no account of what are commonly called "fringe benefits," which have been increasing, especially since the war. I refer to such things as vacations with pay, holidays with pay, and the newly developing pension and welfare plans of various kinds.

There have been some studies in this area by the chamber of commerce, but they are not complete nor are they even very comprehensive. I understand that the chamber of commerce, and a number of business and labor leaders would like very much to see official, carefully done estimates of this kind, and I believe that they should be undertaken.

A third branch of statistics that I should like to refer to, as Mr. Burns did yesterday, refers to expenditure statistics. These are closely related to the standard of living of American workers. Many crimes have been committeed in the name of economy. It is hard to understand why a Government bureau is given funds to collect data and having secured them, refused the necessary money to tabulate or analyze the materials collected.

Now, because of a recent experience, I speak about this feelingly. The Franklin D. Roosevelt Foundation, with which I am connected, has undertaken to find out how the poor in the United States live. In searching for data, I went to the Bureau of Labor Statistics. They collected data on consumer expenditures in 1951. I contracted for some tabulations on how low-income families spent their money. What shocked me was that a lot of the important material on consumer expenditures had not even been put on punchcards because Congress had refused the Bureau sufficient funds to tabulate more than a minimum of the data collected.

If we are to act intelligently in our type of economy, we have to know about all of its phases. If it is true that something over 20 percent of the families in the United States are living on less than $2,000 a year, we ought to know how they are living and what it costs the American people to maintain so large a group of low-income receivers; that is, what is costs in terms of health, in terms of juvenile delinquency, and so forth. The cost of the maladjustments arising from poverty are being borne by our economy. We pay for it as taxpayers, through government aid—city, State, and Federal.

We also pay through the community chest and private philanthropy. Data ought to be made available showing what the cost is. If we knew the cost, we might be spurred on to do something to make these people more productive so that they can produce more and earn more. We ought to know what the effect of the expansion of their income might be upon a growing economy such as we would like to see in the United States; what effect it would have on employment levels and on the expansion of industry.

I mention this in passing because it seems to me highly wasteful to have data collected and not analyzed because a relatively small fraction of the costs of collection was not made available by Congress.

There is another area of work which needs to be brought up to date and considerably elaborated beyond its present state. I refer to estimates of manpower requirements.

I suppose that all of you have read in the morning papers that President Eisenhower has recommended a $50 billion road program. Now, what effect will such a program have upon our economy? What effect will it have upon demand for employment in the cement and steel industries and the many other industries that will be affected by building $50 billion worth of roads?

Some 20 years ago, as the Commissioner of Labor Statistics, I instituted some special studies that gave us a basis for estimating not only the direct, but also the indirect employment brought about by various types of public works. The purpose was to get some idea of how to get the best employment results from public expenditures. The idea was to measure the relative effects of building bridges, roads, houses, schools, and so forth, upon the creation of jobs. If we are to use public works as a stimulant to economic activity what will be the result of one kind of expenditure as compared to another?

Today we again hear talk about the need for a "shelf of public works." If we are going to appraise whether public works are, in fact, the best device for handling a particular economic situation, we need to know how many workers and what types of skills would be employed on the site; what kinds of materials would be required; and hence what kinds of employment would be generated in manufacturing and transporting the materials that would be used.

As I have stated, such estimates were made about 20 years ago for the use of the Public Works Administration. I understand that some of them have been kept up to date, but that others are far out of date. This is the kind of thing which needs to be on tap if we are to know how effective a given type of public works program will be.

But there is another kind of emergency situation in which manpower estimates are of crucial importance. I refer to manpower estimates for a mobilization program.

Unfortunately, we are still living in a world where we must think of military mobilization. We were fortunate in World War II that our guess that manpower would be adequate to meet the needs of industry and of the military establishments proved to be right, but I think it is only fair—and I say this because I helped make them—to confess to you that they were horseback estimates, based in good measure on common sense and not on statistics.

Since then, some techniques have been developed for making more precise estimates of this kind. Among them is a technique known as interindustry or input-output analysis which was initiated on an experimental basis during the last war.

In recent years an interagency committee of various Government departments has worked on the problem of how far the materials for certain types of mobilization programs would put a severe strain upon certain sectors of the economy. It developed a rather elaborate two-way table describing the American economic scene in terms of materials produced by certain industries and sold to others, and vice versa.

This technique of estimating materials requirements, pushed one stage further, could give us labor requirements in sufficiently broad

terms so that we would know at what points the manpower situation in particular industries would become acute if we were forced into a situation where mobilization was required.

This undertaking, I understand, and again for reasons of economy, has been abandoned. I would urge that this work be continued.

I should like to refer to one more matter. That is the question of the validity and the quality of the statistics which have become so important in decisions of the Congress and of the executive branch of the Government.

When statistics like the parity indexes, the Consumers' Price Index, and the Wholesale Price Index, are used in making decisions which involve billions of dollars, and I repeat, billions of dollars, I believe we ought to know just how good the statistics are. They must be constantly reappraised.

A number of Federal agencies have invited criticism and comment from technicians as well as criticism and comment from advisory committees of the users of their statistics. Moreover, valuable contributions in improving techniques have been made by the Office of Statistical Standards of the Bureau of the Budget. Nonetheless, I believe that the public at large is entitled to a periodical, careful appraisal of these data that are used in decision making.

In 1933, the American Statistical Association appointed a committee of nongovernment experts to assess and test the validity of our statistics. As the result of the recommendations that that outside agency made, radical changes were made in statistical techniques and collection of data by some of the Government agencies.

During the war, President Roosevelt had the War Labor Board appoint an outside expert committee to assess our consumer price statistics to see whether they were good statistics or not, and just recently the Secretary of Commerce appointed a committee to check up on the unemployment statistics to see whether they are good or bad.

To give you a concrete example of how important these indexes are I would refer you to the Consumers' Price Index. It has been said that over 1 million workers have their wages affected by changes in that index. A 3-percent error in the index may cost employers or workers $100 million a year. It is certainly absurd to try to save the few dollars needed to improve the index when tremendous sums are affected by its accuracy.

I do not know what the farm parity program costs the Government, but I do know that a 3- or 4-percent error in the parity index can cost the taxpayer a large sum of money.

Representative TALLE. Thank you very much, Dr. Lubin.

Now, we turn to the group discussion part of our morning program. We have these gentlemen here from the Government.

Mr. Burgess of the Bureau of the Census; Mr. Wells of the Department of Agriculture; Mr. Rice, Director of the Office of Statistical Standards of the Bureau of the Budget; Mr. Clague, Commissioner of the Bureau of Labor Statistics, Department of Labor; Mr. Riefler of the Federal Reserve Board; and Mr. Paradiso of the Office of Business Economics of the Department of Commerce.

All of these gentlemen are interested in what the panel members have said. The purpose of our committee is to try to get the panel members and these gentlemen of Government together in discussion.

I think it might be workable at the outset if, say, we gave each of these gentlemen in Government 2 minutes, if he desires, to make a quick comment, and then we will attempt to have a colloquy. We hope to have a half hour for this colloquy.

Mr. Burgess?

Mr. BURGESS. Two minutes, Mr. Chairman, is not enough to do much with the important ideas that have been brought out.

I must say we have been gratified by the emphasis which many speakers have given to the need for the censuses as fundamental for their statistical work.

Fortunately, we have got the census of agriculture money in hand which will help us and will help the Agriculture Department.

One idea that occurred to me, although this is a matter of procedure that I put in for discussion, they mentioned the financial limitations, that we in the Bureau cannot deal with effectively when we make our plans, and they are sifted over a good many times before the actual appropriations are made.

I think it would be a very nice thing if we could have drawn up by the bureaus a schedule of the projects which they consider desirable, with some indication of priority, and have that assembled by the Office of Statistical Standards, not with the idea that these are definite requests, but just a catalog, a listing, something to run over and see what, on first priority and second priority, could possibly be taken up.

Representative TALLE. I may say, Dr. Burgess, that every one of you will have an opportunity to examine the record of the hearings, and you may file any statement that you choose to make; but we would also like to hear you now.

Mr. BURGESS. Well, I put forth that idea. That is my contribution, then, now.

Representative TALLE. Is that all?

Mr. BURGESS. That is all.

Representative TALLE. Mr. Wells, of Agriculture?

Mr. WELLS. Mr. Chairman, I only have three observations.

First, I am very happy that the Committee on the Economic Report is taking a look at governmental statistics. I think it is very desirable and I want to congratulate you on the arrangements for today.

Second, I want to underwrite what Mr. Lubin and others have said about the importance of improving the accuracy and timing of statistics. It makes very little difference whether we work in agriculture, business, labor, or government; we are increasingly dependent upon statistics in one way or another.

Third, you would have difficulty getting me into a discussion or an argument with the gentlemen who have presented their views this morning, because I find myself in substantial agreement with them.

Representative TALLE. Thank you.

Mr. Rice?

Mr. RICE. Mr. Chairman, I have been very much impressed with the wide area of agreement today.

As was pointed out, this discussion today brings in some of the consumers of statistics; yesterday you listened to representatives of producers.

I should like to take the opportunity of referring to a question that Mr. Bolling asked of Mr. Burns yesterday with respect to the

location of responsibility for dealing with the inadequacies of statistics, some which were pointed out yesterday.

I think we might think of it, Mr. Bolling, in terms of a market, with demand and supply.

Now, the Office of Statistical Standards cannot undertake to read the minds of those who use the statistics.

The Council of Economic Advisers, whose Chairman you addressed the question to, represents, in my judgment, the demand side for statistics; he represents the consumers of statistical data and, therefore, in my own remarks earlier, I pointed out that we would defer to the Council of Economic Advisers as to other consumers of statistics, as to the kind of data that they need.

Now, once we have an indication of the data which are needed, responsibility shifts to the Bureau of the Budget. We seek to cooperate with the agency that produces statistics and with the consumers of statistics to see that the latter are supplied with information to the best possible advantage. This must be within the resources available and must also be subject to the administrative responsibilities of the heads of the departments which collect the statistics.

Pardon me for taking this opportunity to bring in that comment.

Representative TALLE. Mr. Bolling?

Representative BOLLING. Mr. Chairman, I think that those reading the colloquy we have had yesterday will find it very clear where the responsibility lies. It so happens that both the Council of Economic Advisers and the Bureau of the Budget, as I remember it, are in the Executive Office of the President.

Representative TALLE. We will move on to Mr. Clague of the Bureau of Labor Statistics of the Department of Labor.

Mr. CLAGUE. Mr. Chairman, I think there are several points on which I would comment briefly.

We who are engaged in statistics in the Bureau of Labor Statistics would reemphasize strongly the point made by a number of those discussing the importance of benchmarks.

We need census benchmarks; we need administrative agency benchmarks.

We who depend on current samples must have solid foundations from time to time to which to relate our data.

Secondly, with respect to the problem of manpower that Mr. Lubin mentioned, I did have the good fortune to present to the Members of Congress last week a modest request for some work on the effect of certain types of public works upon employment, the kinds of employment, the timing of that employment, the skills and the volume of it.

Mr. Lubin is right, however, that with respect to mobilization studies, the interindustry work has been ended and in our Bureau, at least, no further work is being done in this area.

Mr. Lubin mentioned several of the indexes on which many billions of dollars turn. We discover from time to time in our Bureau new series to which the public is turning for uses we had not previously understood. We made slight modifications recently during the necessary revision in the average earnings per hour in 1 of the industries that we publish in our employment hours and earnings series; we changed the figures by 1 cent per hour. In consequence, we had an hour-long phone call from a business concern which had contracts that

were escalated on that series; at one point in the conversation when we explained the necessity for this mild revision and we deprecated a little bit the amount of the change, he said, "Do you know how many millions of dollars that would cost us?"

So, that growing use of data in contracts has some bearing on those of us who work in the field of current statistics.

We realize the balance that we have to maintain between the accuracy and validity that Mr. Lubin mentioned, with the necessity for periodic revision and keeping up to date as much as possible, and on the other hand, keeping business and labor informed of those changes so that they may adapt their contracts to the changes that are made.

I would like to make one final point. Mr. Seidman, on behalf of Mr. Shishkin, mentioned a number of ways in which statistics in our Bureau should be improved.

Well, we recognize that need very much, but we also recognize that there is no way of handling it except by having more funds.

If more wage studies are to be made, and if we are to make visits to plants instead of using mail questionnaires, we will have to have the funds with which to do that work.

Representative TALLE. Mr. Riefler?

Mr. RIEFLER. Well, I have been fascinated by the papers this morning, particularly from the point of view of the growth of the statistical services. Having lived with these problems through a great many years—to find statistics thoroughly integrated within and between Government and industry, is quite a confirmation of the work and integrity that has gone into the Federal statistical program.

In so far as the suggestions in our field of particular concern, that is, financial statistics, each one has been interesting and valuable and we will certainly take them under consideration.

Representative TALLE. That brings us to Mr. Paradiso.

Mr. PARADISO. Mr. Chairman and gentlemen, I have been impressed with the papers presented here and I find myself in considerable agreement with most of the things said, certainly with the need for benchmark data and with the need for more timely information in certain areas.

But I do want to stress one point, and that is that I do not believe that we should sacrifice quality just for the sake of getting a particular series, let us say, 3 days ahead or 4 days ahead of when we usually get it.

I think we should try to get data out so that it is reasonably timely, but I think we should keep in mind that getting series somewhat in advance or a little bit ahead does often involve sacrifice of quality.

One other point I would like to make is that I think that Dr. Kyrk made a very important point in connection with the problem of analyzing the relationship of consumer expenditures to consumer income and in view of the fact as she has stated it, it does appear as if some of these relationships have been broken down but we do need to have a great deal more information and detail in order to explore that problem in detail.

Representative TALLE. We appreciate the cooperation you are giving this committee. Do you have some further comments, Mr. Gainsbrugh?

Mr. GAINSBRUGH. I would like to add some comments on anticipatory statistics, particularly the need for more intensive analysis before we proceed to too rapid proliferation of the existing bodies of data.

The story has been told about the farmer who was approached to attend a course on progressive agriculture and who replied that he was afraid he was not farming as well as he already knew how.

Now, because these anticipatory statistics are recent additions to the Government's statistical program, they warrant close scrutiny with respect to their concepts, adequacy, and application. The temptation, of course, is to move toward broader samples, expanded coverage, and the proliferation of data. I would think, however, that this is the time—before decennial censuses—to pause for a long, hard look at the data we already have, for a better appreciation of their meaning and their portent.

There are three anticipatory series that are most frequently used by the public: the plant and equipment expenditure series, the survey of consumer finances, and manufacturers' new orders. All three of them rank very high in the list of priorities.

The SEC-Commerce figures on anticipated capital outlays for business plant and equipment cover one of the most significant aspects of economic activity, both on account of the dollar magnitude of private investment and on account of its volatility. Considerable improvements have been made in the series since 1946, due in part at least to the corrections being made for persistent understatement in capital expenditures.

But aside from a 1950 study of the factors making for revisions in company anticipations, we know little about the reasons for the variations between the first and second estimates of business outlays and between the second estimates and the actual expenditures.

Considerable effort is being made to strengthen this series, but I feel that better understanding of why the figures change is essential to intelligent use in economic analysis. It would be of interest to know the extent to which alterations in the plans of individual companies reflected changes in construction and equipment costs, acceleration or stretch-out of investment programs, or short run revision of investment programs on account of changes in general business conditions.

Such information might be solicited in the course of the survey itself, by adding a few key questions to be answered by those firms whose estimates differ significantly between first, second, and third surveys.

On the second set of anticipatory or foreshadowing statistics, the survey of consumer finances, the same sort of better understanding of the figures and what lies behind them is, I think, necessary.

Admittedly, consumer expenditures on durable goods are a strategic factor in our economic situation and these surveys have already played an important role in keeping Government and business informed of the buying intentions of consumers.

Experience with these surveys is as yet limited. Would they be improved by expanding the sample and providing greater cross classification between consumer intentions and characteristics of consumer

households? Should we develop a continuing consumer panel in part as a test check on the current mechanism? Before we plunge too far ahead in expanding the frequency or scope of such statistics, should we not reexamine the nature of the individual responses to date?

Is there strong correlation between consumer anticipations as reported and their realizations in the course of the year? It may very well be that consumer purchases of durables are so haphazard that reported intentions are not very reliable as compared to spur-of-the-moment decisions. Or there may be a range of intentions, from vague to determined, which can be more accurately assessed if we know more about the stock and age distribution of durables in the individual consumer's possession.

This sort of analytical mining of the surveys already taken might provide us with better insight into the whole question of measuring consumers' intentions and projecting consumers' expenditures.

And finally, we have manufacturers' new orders. If there is any series that business would like to see speeded up, this is the one that comes up most repeatedly.

As in the two instances which I have already discussed, this series, too, holds a prominent place in our battery of economic statistics. It is of sufficient importance to merit reexamination, as well as increased coverage and detail. How far to go in expanding the sample depends in part on the uses to which the data are put.

We might utilize these data for gaining further insight into the process of inventory adjustment, without adding greatly to the scope of the monthly survey. If the sample of manufacturing firms—from which total new orders received are now deduced by comparing backlogs and sales—were asked to report also on orders which they place, then the comparison of trends in orders received and orders placed would give us a picture of inventory decisions in the making. This would be true for individual firms as well as for major industry divisions at the various stages of manufacturing.

I have concentrated my remarks on these three series because they are all relatively young and in the process of development. A reexamination of their performance now could lead to better understanding of the figures themselves and their behavior, upon which to build their subsequent expansion.

The point I have made in my supplementary comments is that the anticipatory or the foreshadowing statistics have become extremely important for purposes of business analysis.

They are so new, however, that I am fearful they will become incorporated in the body of economic statistics before they have been given a thorough and careful reexamination and that may lead to too much complacency about them.

We have not yet had a chance to test many of these anticipatory statistics against business contractions. I think we ought to take advantage of the fact that we now have our second experience with these series in a period of at least mild business and review them intensively before we move on to further elaboration.

Representative BOLLING. Mr. Chairman, before the morning's session is over I would like to ask a few questions.

First I would like to inquire of Mr. Gainsbrugh, who has made a number of very interesting and valuable suggestions, if he agrees with

the comment that has been made by a number of the other panelists to the effect that the Congress has been somewhat stingy in the appropriation of funds with regard to statistical matters.

Mr. GAINSBRUGH. I think we have been held back through lack of funds; yes.

Representative BOLLING. And that basically does go back to the question of appropriation, of money available?

Mr. GAINSBRUGH. I would say in good part.

I suspect, however, that we would have to say also that a better job of education can be done within business and congressional channels as to the usefulness and the value of benchmark material. With that job done, perhaps that particular road block might be removed.

Representative BOLLING. Is there any member of the panel who has spoken up to this point who feels that during the past 6 or 8 years more funds might not well and profitably have been spent for this kind of research?

(No response.)

Representative BOLLING. In other words, all members of the panel who have spoken up to now feel that Congress might well have appropriated additional money.

Now, I would like to make a brief statement. The group on the panel represents the academic community, as I understand it, the business community and the labor community, and I would suggest that if all representatives of these different groups feel that Congress has been stingy in its appropriations that conceivably the groups themselves have not been very effective, because I would remind the panel that Congress does not operate in a vacuum.

That is all, Mr. Chairman.

Representative TALLE. Thank you. There is still time for comments by the other panel speakers. Mr. Seidman?

Mr. SEIDMAN. I certainly endorse what Congressman Bolling has just said.

I know that we have attempted from time to time in representations to the Bureau of the Budget and to the Appropriation Committees to indicate the areas of Government statistical programs that we think are the most urgent, but too often, it is clear from the discussion this morning, we have been unsuccessful.

I would like to endorse what has been said by the other panelists as to the need for benchwork data. I think there are certain types of data that we recognize as benchmark data and there are others that are not so recognized even though they are essentially the same kind of data. The Consumers' Expenditure Survey of the BLS has been mentioned, for example, and that is an absolutely essential benchmark data in a sense, in order for us to have a Consumers' Price Index which is meaningful and which measures the changes in the cost of living.

I would also like to stress the importance of maintaining the quality of the various statistical series.

At a time when economic decisions and large expenditures by Government and in the economy in general depend on an accurate measurement of economic trends in statistical terms, it is most important that this quality be maintained.

I would like to just stress that there is no turning back at this point. We can no longer regard statistics as being a luxury because peo-

ple have grown to use them to a greater extent and so really these short cuts—and I shall use an example which was mentioned before, of mail questionnaires when you really need a field investigation to get the information you need—are poor economy in any long run sense, in terms of meeting the needs of the economy.

I also feel that timeliness is extremely important. As an example, the only statistics on family income, the only reliable statistics we have are those of the Bureau of the Census Current Population Survey but they do not appear until a year and a half after they are collected. Well, they begin to lose their relevancy in terms of usefulness for economic decisions because of the time lag. In the case of the decennial census this delay is even greater.

I also would like to emphasize the need for securing data in their most meaningful form, and I mean in that regard that the data should conform to economic concepts.

The case of unemployment statistics is one which has been mentioned before but I would like to stress also the case of wages. It is important to have information on earnings that can be used by both labor and management at the bargaining table—that is, the important thing to know is the wage rate for a particular industry in a particular occupation. Those are the only wage rates that are really comparable and have real economic meaning.

Finally, I would like to stress that there are certain areas in which we have either a complete or almost complete gap and much more still remains to be done.

To mention only two such areas, there is one that we do not hear much about but which is very important and that is getting information on industrial injuries—what is the cost of industrial injuries; how to attempt to maintain the incomes of people affected by industrial injuries; in what industries do they occur; what preventive measures are being adopted?

This is the kind of information we desperately need, but the Bureau of Labor Statistics has only a very small program because it does not have sufficient funds, even though we have stressed in general terms industrial rehabilitation and the handicapped program and so on.

The second major area, which I am sure that Mr. Colean will refer to this afternoon, is housing and construction.

We are particularly interested in finding out more, not just about housing as an industry but also what kinds of houses we have in America, what the characteristics of our housing supply are and the characteristics of the tenants and the owners of the houses.

Representative TALLE. Thank you. Mr. McCracken?

Mr. MCCRACKEN. Yes, I have just one comment, which is to back up what Dr. Paradiso mentioned a moment ago.

I am sure that not very many of us would try to insist on the fact that aging is a positive advantage in statistics, as it may be with certain other products. Nevertheless, I do think that the current pressure which the statistical agencies are under at the present time for promptly and quickly getting out at least preliminary releases may be something which is not altogether well advised.

I was going to comment on this anyway, even before Dr. Paradiso mentioned it.

We do have to recognize that the early statistics are inevitably based on less firm tabulations than the complete data.

Moreover, the initial release is going to get more attention than the final correction. Now, this may not be very important if it is just a change of 3 or 4 tenths in a very large figure. But the point is the ambiguity in the initial release may be large relative to the change from the prior month and in many analytical cases this could be important. I do think possibly something might be done to try to test how rapidly the error enlarges as the release date or the cut-off date is advanced. But the price of too early a release date is apt to be an infirm statistic.

Representative TALLE. Mr. Miller?

Mr. MILLER. Mr. Chairman, I happen to be a farm operator—I don't think Mr. Gainsbrugh meant to put any blame on me—that I do not farm as well as he knows how.

One other comment, to Congressman Bolling particularly, because of his comment about appropriations. We were quite disappointed, and as a matter of fact I can't understand yet why a member of the joint committee took the position in the Senate that he took last year against the appropriation for the Census of Manufactures. We are in the position of having done a lot of work in industry and now have to throw it out of the window because we have to start over with a new schedule.

Representative TALLE. Thank you very much, Mr. Miller. I won't expand on that, but I know a little about it. Dr. Kyrk?

Dr. KYRK. I do have a few observations which I will try to make quickly. First, I have been interested in the fact that others besides myself feel that perhaps there has been a little too much emphasis on increasing the timeliness of economic data. The position of some users of the data that an economic statistic has no significance unless it is of the present moment or almost the present moment is surely a mistake. One result of that point of view that has been emphasized around the table is that it may affect the quality of the data adversely. I would emphasize also that it means that we pour money, at least in the field about which I have been speaking, into the collection of data and then, through the desire to keep them up to date, we ignore largely the body of data we have collected and pour our money into more and more collecting.

Back in the late twenties Mr. Hoover stimulated the formation of a committee that would formulate plans for study of consumption according to income, hoping that thereby he might get money from Congress to make such a study. This committee laid down as a principle that at least as much money should be appropriated for analysis as for collection. I think if that rule had been followed throughout subsequent history, our knowledge of the meaning of the expenditure data that we have collected would be much greater.

I might point out that one of the most expensive statistical tasks is the household survey, where you attempt to gather the complete data on expenditures and savings, especially in the United States with its generally high level of income. It is much easier to reconstruct the short and simple annals of the poor. They are very conscious of where

their money goes, but as the general income goes up and there is more to be accounted for, we find a more adequate memory of what the money was spent for.

I would also like to emphasize that the analysis of data and the collection of useful data go hand in hand. I am always somewhat reluctant to urge the collection of data unless we have rather firm notions of their uses and the plans for collection as definitely based on those uses. Expenditure and income data do not in and of themselves reveal what we want to know. Mr. Wells in his memorandum speaks of the use of family income data to show the relative economic position of the farm and nonfarm populations. Now we know that is a very significant problem, but we also know that the data in and of itself would not reveal the relative levels of living or the economic positions of the two. This is a very important problem to work on and we need the data to attempt to solve it. When we do solve it we may be able to throw light on another matter of great interest, that is the international comparisons of economic positions and levels of living.

One final question about analytical work: How is it to be divided among Government and non-Government personnel? It is perhaps especially difficult to secure adequate appropriations for analytical work for Government personnel. It does not have the visible character of field work and tabulation. Nor is it desirable that all analytical work be left in the hands of Government personnel. Only the Government can collect economic data, but analytical work is possible for the private scholar or groups of scholars. Insofar as analytical work is done, and some should certainly be done by Government personnel, this should not delay the availability of the data to others. The analysis should usually follow the processing and publication of the data.

Representative TALLE. Thank you. Mr. Martin.

Mr. MARTIN. Mr. Chairman, you will observe I was one of the few speakers, if not the only one, who was pleased with the congressional program for statistics.

Representative TALLE. I noticed that characteristic in your testimony.

Mr. MARTIN. I was not happy at the variations in the carrying out of the program which Congress has itself laid down.

I think the important point is that the Congress has in respect of the major benchmark programs adopted what seems to me to be a wise point of view, and my first comment would be to reiterate my last comment in my direct presentation today, that one of the most important characteristics of a wise statistical program is that it be consistently conducted. There have been numerous instances in the recent past where, in behalf of State and local governments and otherwise, systematic plans for investigations at some expense were made in anticipation of the major benchmark data which were regularly authorized by Congress, and the plans had to be junked at some expense when the benchmark data were not forthcoming as the result of failure to carry out those plans.

Now, the second comment goes to a point raised in my original discussion.

In preparation for coming here today I consulted with a sizable number of State officials and raised the general problem of what statistical shortages there were that embarrassed those particular State workers.

Representative TALLE. A very good question.

Mr. MARTIN. And the answers are just as interesting as the question. The answers in all cases except one where a particular official was employed in a setting that diverted his attention from what most of these people regarded as the main issue—their answers in every other case referred expressly to the failure of the census or Government to give us comparable data with respect to other States, comparable data with respect to local government operation and comparable data generally. The question I think was formulated in a sufficiently broad fashion so that this construction was certainly not suggested in the question itself.

Thank you, sir.

Representative TALLE. I want to have the panel speakers express themselves freely. We have open minds and we try to be objective.

We have time for one more comment. Dr. Lubin, do you have any further remarks?

Mr. LUBIN. I should like to reemphasize that we must not only analyze the facts that we collect, but also the quality of the data assembled and the methods used in drawing conclusions from them.

Most Government bureaus will admit that there are weaknesses in some of their statistical series. They would like to improve them but they have never been given the money by Congress to hire people from the outside who can make an unbiased review and recommend changes and improvements.

I think that the facts will show that the money that the Government saves in not making such funds available may result in cost to the taxpayer that are many, many times greater than the sums that would be involved in periodic reviews of the quality of the data turned out.

Representative TALLE. Any further comment? Mr. Bolling?

Representative BOLLING. No.

Representative TALLE. We will adjourn now to meet in this room sharply at 2 o'clock.

(Whereupon, at 12:15 p. m., a recess was taken until 2 p. m. of the same day.)

AFTERNOON SESSION

Representative TALLE. The Subcommittee on Economic Statistics of the Joint Committee on the Economic Report will resume its hearings.

I repeat briefly at the outset what I said this morning, that we operate under the 15-minute rule. The Chair wants to say that the committee appreciates the fact that the panel speakers stayed within the time limits this morning.

This afternoon the first panel speaker will be Mr. Miles L. Colean, consulting economist.

I will save time and not comment on your impressive record.

You may proceed Mr. Colean.

STATEMENT OF MILES L. COLEAN, CONSULTING ECONOMIST, WASHINGTON, D. C.

Mr. COLEAN. Thank you very much.

My subject is construction statistics. I assume by construction statistics we mean statistics covering the inventory of standing structures, their characteristics, condition, and utilization; current activity in all the manifold varieties of construction, including both the erection of new structures and the repair and maintenance of existing ones; production and distribution of building materials and equipment; investment and employment in the construction industry; costs and prices; characteristics of the construction industry and its customers; and the factors that determine the demand for construction.

Interpreted at its broadest, this would cover every kind of social and economic data from population changes to the fluctuations in the price of Government bonds, because the amount of construction activity is the resultant of all the forces at work in the economy. For the purpose here, however, a narrower interpretation is necessary; so I shall limit myself to data on inventory, current activity, and other series that are readily identifiable with construction operations.

On the question of inventory, our knowledge of existing structures is practically limited to residential building. The decennial census of housing is of inestimable value. It gives us, each 10 years, a fairly comprehensive picture of the existing stock of housing. It permits us to measure to a very considerable degree the changes in the inventory during the intercensal period. It provides essential data for all housing market analysis and for the formulation of Government policies in respect to housing. It provides the benchmark data from which methods for gaging current activity can be developed. Any lapse in the taking of the housing census or any diminution of its scope would leave us without a basic chart in the economic sea.

I might say we had some very worried and anxious moments when the housing census was up the last time. It got through only at the last moment.

Actually, when the next census period comes around, some expansions of the data should be discussed. In the meantime we are faced with the fact that changes in the inventory are taking place so rapidly that much of the 1950 data is already inadequate to give accurate benchmarks. While it is obviously impracticable to suggest that inventory changes be measured on a monthly or even an annual basis, an intermediate sample housing census taken at the midpoint between the comprehensive census would be of great help.

Beyond this 5-year checkup on the whole picture, 3 other aspects of the inventory require more frequent reappraisal. An important part of our housing supply comes from the alteration of existing dwellings to produce more family units and from the conversion of nonresidential buildings to residential use. We have no measure of this activity. At the same time, an unknown number of dwelling units are lost by demolition and by conversion of residential structures to nonresidential use. An annual sampling of conversion and demolition would fill an important gap in our knowledge, and one of especially

great value in working out urban renewal programs such as are contemplated in the pending housing legislation.

The third needed addition to current inventory knowledge is an estimation of vacancies. Changes in vacancies are a vital clue to changes in demand, and a periodic check on these changes would give us a badly needed instrument for determining both Government and business policies.

Dr. Burns also recommended data on rents under current leases. That would also be a very sensitive indicator and along with vacancies would help us, Mr. Chairman, immeasurably better to keep track of what is going on.

We have, of course, no real inventory knowledge at all so far as nonresidential buildings are concerned. It would unquestionably be desirable to have such knowledge as a means of measuring our wealth and gaging economic potentialities. I assume, however, that anything like a comprehensive real property inventory is, in view of its cost in comparison with that of more urgently needed statistics, beyond contemplation at the present time.

On current construction activity, we have only two reasonably satisfactory measures: (1) Contract awards for Federal construction, and (2) estimates of the number of new nonfarm dwelling units started, compiled according to the revised methods recently announced by the Bureau of Labor Statistics and made possible by a special appropriation a year ago. As a result of the improvement in the new starts series, which, I think, will be published for the first time in the next week or so, we shall have a corollary gain in the accuracy of the estimates of expenditures for residential construction.

Otherwise the statistics on current construction activity are notoriously inadequate. We lack reliable data about new nonresidential construction on a nationwide basis; we do have pretty good data from the F. W. Dodge Co. with respect to the 37 Eastern States, but that omits a lot of the area beyond the Mississippi and including the west coast where so much work has been going on lately.

We are hopelessly in the dark about the amount of repair and maintenance activity for all kinds of construction. Since the amount of repair and maintenance work is probably at least between a quarter and a third of the total, the lack of data about it is particularly serious.

The defects of these data have been commented on so many times that there is no need to repeat the story here. The material which was sent around to the panel members recites this fully, and I also have a report of the committee of the United States Chamber of Commerce, issued a year ago February, on that subject, which I should like to put into the record if that is agreeable.

Representative TALLE. Without objection, it will be done.

(The report of the United States Chamber of Commerce follows:)

CONSTRUCTION MARKETS

No. 4

CHAMBER OF COMMERCE OF THE UNITED STATES,
CONSTRUCTION AND CIVIC DEVELOPMENT DEPARTMENT,
Washington 6, D. C., February 1953.

WHAT DO WE KNOW ABOUT OUR MARKETS?

As construction activity has grown in size—to over $40 billion a year—and in importance to the whole economy—about one-tenth of the total national product—our knowledge about it has lessened. This may seem an extravagant statement in view of the estimates of volume, activity, cost, etc., that are freely used in speech and press. Nevertheless, this is the situation: At no time has the Government's statistical information about construction been of high dependability and today the quality of figures is poorer than at any time in the postwar period.

This unfortunate condition is not due to lack of competence in the Government's statistical agencies, which are doing the best job that can be done with the resources available. It is due, rather, to the failure of Congressmen and businessmen either to recognize the importance of sound data as a basis for market planning or to recognize just how inadequate the present data are for this purpose.

To view the situation more clearly, we may examine the two most important month-to-month statistical series on construction: (1) new construction activity (dollar value of work put in place), prepared jointly by the Departments of Commerce and Labor, and (2) number of nonfarm houses started, compiled in the Department of Labor, Bureau of Labor Statistics.

STATISTICS ON CONSTRUCTION ACTIVITY

The monthly estimates of new construction activity are made by taking the source data—usually building permits or contract awards—and then applying to them a number of adjustment factors: (1) to allow for jobs that did not go ahead after permits were issued or contracts let, (2) to account for the difference between the permit valuation and actual cost, (3) to include work not covered by building permits or contract reporting services, and (4) to spread the total cost on a monthly basis over an estimated construction period.[1]

The activity estimates vary a great deal in probable accuracy from fairly reliable figures for public utilities and Government construction to almost unalloyed crystal gazing for farm construction. The estimates are questionable enough for new construction, but they have at least a grounding in fact. For maintenance and repair work, however, the estimates are matters of judgment rather than of data and can be published only as an annual assumption, without the benefit of any basic basic statistical reporting.

Almost certainly, the published series represent an understatement of the actual amount of construction underway. Special research done by the Bureau of Labor Statistics indicated that, to account for all the building materials consumed in the year 1947, the official estimate for total new construction should be raised by 13 percent and the estimate for maintenance and repair work by 21 percent.[2]

A margin of error of such proportions is a warning signal not to look upon the activity estimates as an accurate measure of what is actually being done. They are useful in indicating trends over a long period of time but, even here, they may not be accurate enough to reveal turning points with much precision. They are the best we have and they are the best that can be done with the present methods and available funds; but beyond this there is not much that can be said for them.

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[1] See Construction and Building Materials, Statistical Supplement, May 1952, U. S. Department of Commerce, pp. 63–70, for description of sources and methods for producing the activity estimates.

[2] David I. Siskind, Construction in the 1947 Interindustry Study, Division of Interindustry Economics, Bureau of Labor Statistics, U. S. Department of Labor, October 1952 (mimeographed).

STATISTICS ON HOUSING STARTS

The monthly estimates of new dwelling units started are, in part, made by taking residential building permits as reported to the BLS from most of the areas requiring permits and applying adjustment factors to (1) cover the difference between the stated permit value and the probable actual cost, (2) allow for the lapse of permits where work does not go ahead, and (3) account for the lag in time from the permit date to the date when construction is begun. This part of the estimate covers the more important towns and cities and a few county jurisdictions, but it does not cover numerous small places nor outlying unincorporated parts of metropolitan districts where permits are not required.

To get a line on the number of nonfarm houses that are started in these nonpermit areas, the BLS makes an estimate derived from personal surveys of new starts in a sample of 96 counties of which 32 are surveyed each month. The figure thus obtained is enlarged to cover all nonpermit areas by using an assumed ratio of the sample to the total.

This procedure is of course far short of a thorough count of all the houses started each month, and it must necessarily be so. A complete monthly census of starts would take more time and expense than could possibly be considered. Something short of such a complete count must therefore be used; but what we have is a great deal too short.

The present scheme of combining permit estimate for permit areas and personal surveys for nonpermit areas could form the basis for a satisfactory estimate if some of the glaring deficiencies now present did not exist. Here are some of the shortcomings: Not all permit areas send reports to BLS, so that at the outset a correction has to be made to include what the others might show if they did report. The difference between permit value and actual cost is made on the basis of out-dated investigations. The lapse-and-lag factors are also derived from studies now several years old. The BLS has never been given the funds to bring these investigations up to date.

On the nonpermit area estimate, the monthly sample is exceedingly small and requires correction as the total sample revolves, thus creating a lag of 3 months between the preliminary and final figure. The sample itself is selected on the basis of conditions prevailing at the time of the 1940 housing census and the blowup factor for converting the sample figure to a figure for all nonpermit areas is based on the same 13-year-old base. The assumed relationship between work done in permit and in nonpermit areas is similarly out-dated, but, again, funds have not been available to correct this deficiency.

It should be obvious that the result is far from being a dependable figure. Nevertheless, the Congress in 1952 adopted this estimate on a seasonably adjusted basis, as a device for determining the withdrawal or application of real-estate credit controls. In other words, the fate of one of the country's greatest industries was to be determined by a statistical abstraction of indefinite remoteness from reality. The large gap that showed up between a 10-year total of the housing starts figures and the 10-year net growth in total housing units as measured by the 1950 census indicated that the remoteness might be considerable.

CONSTRUCTION COST ESTIMATES

When we move from these two principal statistical series to other types of construction statistics, the atmosphere becomes even murkier. We do not, for example, have any authoritative indexes of the cost of construction. Because of the variability in the combinations of labor, materials, and operating efficiency among the several types of construction, a single construction index is not practical.

The composite construction cost index developed by the Department of Commerce is simply a combination of some 14 privately compiled indexes for various types of construction weighted according to the relative importance of the major classes of construction. The private indexes referred to—prepared by appraisers, builders, and publishers—are mainly based on weighted combinations of labor and materials prices.

The figures on the labor-materials components are themselves short of perfection—although the wholesale materials price index of the BLS has been vastly improved during the past few years. But the main difficulty with the cost figures is the inability to judge with accuracy what the weighting of the various components should be—we do not know how much materials actually

go into the various classifications of structures—and to take into appropriate account the productivity of labor and efficiency of the operation.

Just how short of the facts the available cost indexes are, no one can say. This is not only a matter of importance to those of us who seek the guidance of a cost index but it has other implications as well. The Department of Commerce uses its combination cost index as a means for converting the current dollar volume of construction to a series representing the volume of construction at a constant price level, the purpose being to produce a measure of the actual volume of work done.

The resulting constant-dollar figures plainly can be no better than the cost indexes and the activity figures on which they are based. They serve as a broad indicator of trend but cannot safely be used for much else.

The only other measure of physical volume is the square-foot-of-floor-area estimate supplied by the F. W. Dodge Corp. as a byproduct of its contract-award reports. This estimate, while useful so far as it goes, does not, however, provide complete coverage in any area and does not include work done in 11 of the trans-Mississippi States.

FINANCIAL STATISTICS

Monthly information on mortgage lending is presented mainly in the form of a series of Nonfarm Mortgages of $20,000 or Less Recorded, compiled by the Home Loan Bank Board. This is obtained through the cooperation of local recording officials in areas where cooperation can be obtained—a circumstance which results in fairly reliable figures for only a little over half of the States and does not permit a breakdown by type of construction, or even as between transactions on existing or newly constructed property.

An annual series of the dollar volume of mortgages on 1–4 family houses is compiled by the Home Loan Bank Board from reports obtained from various institutional lending groups. The detail and frequency of reporting by these groups varies considerably, so again we have a series that is as good as its compilers can make it under the circumstances but capable of much improvement. In addition we have the operating statistics of FHA, the VA Loan Guaranty Service, FNMA, and the Public Housing Agency, which, with the exception of the last, are readily available in clear and usable form.

Out of this material a fair picture of residential finance may be pieced together; but the figures on the financing of other types of property, while intriguing the statistical adventurer, do not offer reliable knowledge of the current flow of funds into the construction market.

INTO THE GREAT UNKNOWN

For almost every other aspect of construction and real-estate activity, there is almost nothing available on a current basis; and there are not even decennial benchmarks other than the data gathered about housing by the Bureau of the Census at the end of each decade. (Plans for intercensal sample surveys of housing have been put on ice for lack of funds.)

The BLS, because of a 50 percent budget cut in 1951, has been forced to abandon its investigations and reports on the characteristics of new houses. We have nothing on vacancy except for scattered local surveys by private organizations and nothing on rental trends beyond a few local private surveys and the sampling of residential rents made by the BLS in its compilation of the consumers' price index.

We have no knowledge as to the number of structures of various types, and nothing of value on the obsolescence and depreciation of structures—all of which is an important concern for long-term investers. We know very little about the characteristics of the building industry—the number of principals and employees, the size of organizations, the volume and type of work they are engaged in.

THE NATIONAL CHAMBER'S CONCERN WITH THE STATISTICAL PROBLEM

For many years, the construction and civic development department committee of the chamber has devoted attention to the improvement of construction statistics. A subcommittee dealing with this important matter has reached the following determinations:

1. That the Federal Government should be responsible for the collection and publication of basic data of general usefulness to all participants in construction activity.

2. That the most essential of the broad data series are: (a) the dollar volume of construction put in place, and (b) the number of nonfarm dwelling units.

3. That in the interests both of Government economy and statistical authenticity, effort should be concentrated on the improvement of these two series before more ambitious programs are advocated.

WALTER E. HOADLEY, Jr.,
Chairman, Subcommittee on Construction Statistics, Construction and Civic Development, Department Committee.

Mr. COLEAN. Suffice it to say that this above all others is the area pressing for immediate attention. Activity data provide the primary guides for making private market judgments and for determining current public policy.

For example, a sound Federal policy in respect to public works should be developed in the light of what construction the States and localities are undertaking or planning to undertake. Yet we do not now have such information in any dependable degree of accuracy. We shape broad economic policies on estimates of the gross national product; yet these are based in part on grossly deficient estimates of construction. We set up far-reaching means for stimulating new housing, yet we know nothing of the reality or potentiality of improving the character of the existing supply.

In view of the vast stake of the Federal Government in construction through its direct operations, its numerous forms of subsides to State and local bodies, and its insurance and guaranty of mortgages, it is vital to have the guidance that could be provided by accurate statistics on current and impending activity. In view of the general desire to depend on the private market to maintain a healthy economy, it is equally important that businessmen have these guides for their decisions.

I believe there will be a wide agreement both in and out of Government that the statistics I have been describing should be given first consideration. These do not, however, exhaust the areas in which data are needed for a valid appraisal of construction activity and the industrial operations involved in it. I shall describe briefly these other areas, some of which are hardly of less importance than those already mentioned.

The information on the production of building materials and equipment is of a very sketchy nature. The sources of data need to be broadened, the number of materials covered should be expanded, and the sources for obtaining the data improved. These improvements would lead to a better index of materials production.

The figures on employment in construction are limited to what is referred to as contract construction, but even here the coverage is probably deficient. Employment in direct or force account construction by persons not classified as contractors is largely an unknown area.

Data on the requirements of materials and labor for various types of construction are either nonexistent or out of date. Dr. Lubin mentioned studies he conducted as long ago as 15 years, and there has been very little done since. Now we are launching into a tremendous roads program without full knowledge of what the labor and materials requirements are likely to be and what the impact will be on the economy. The lack of such information caused great difficulty in making materials allocations for construction during both World War II and the

Korean war. It affected the execution of large defense projects where provision had to be made to bring into the locality large numbers of workers.

Important as the construction industry is recognized to be, little is known of the size and characteristics of its component elements. The last attempt at a census of construction, in 1939, was not a satisfactory one; and there are admittedly great difficulties in compiling such a census satisfactorily except at a great cost. It is possible by sampling methods, however to get a good picture of the residential section of the building industry—the number of builders, the size of their operations, how they are affected by current conditions, and many other factors relating to their role in the economy. Such a survey was made in 1950. Sufficient changes undoubtedly have taken place since that time to warrant making another similar survey; and, if repeated annually, it should yield helpful information not only about current conditions but also about future plans of builders.

On some past occasions we have had some information on the characteristics of the housing currently being produced, including such items as number of stories, number of rooms, method of construction, materials used, method of financing, and sales price or rental. Mr. Seidman this morning also mentioned the desirability of having better information on the characteristics of buyers of houses. That should be endorsed.

If regularly provided, this kind of information, along with that on builders and their operations, would offer excellent sources for private research on materials markets and distributing facilities. It would give extremely important aid in formulating and evaluating the effectiveness of Government housing policy.

Construction cost is another area of insufficient and possibly misleading information. The official—Department of Commerce—index of construction, which is used to obtain a measure of the physical volume of construction as well as for other purposes, is simply a combination of various privately compiled construction cost indexes, weighted by the relative importance of the major classes of construction. There are some deficiencies in all the individual indexes, in that all elements of materials, services, and labor may not be included; regional variations in cost do not get sufficient consideration, while the effects on cost of changes in efficiency, technology, design and similar factors get scant attention. Up to the present time, it has not been possible to obtain funds even to develop a satisfactory cost index, let alone carry one on as part of a regular statistical program.

Information on the availability of financing and the flow of funds into construction plainly offers an important guide to public and private construction policy. Scattered data on non-farm mortgage lending are obtainable in respect to the several main types of lending institutions; but much of this does not provide adequate classifications by type of property or distinguish between financing of new construction and existing property. The FHA and VA publish extensive information about their own operations, but these sources cover less than a third of the total of nonfarm mortgage lending activity.

The only broad series of nonfarm mortgage data is that on the number and dollar volume of mortgages recorded of $20,000 or less

in amount. This series is based on a gravely insufficient and uneven sample, something of about the quality of building permit reports in the 1920's. Moreover, it does not distinguish between residential and nonresidential property or between new and existing construction.

Since housing policy and mortgage policy are, for most of the Federal program, one and the same, since the scope of the private building and real estate markets is directly related to the availability of mortgage funds, and since changes in the supply of funds signal changes in building activity, special attention needs to be given to ways of improving statistics in this area.

I have a few recommendations I wish to offer.

Where so little is satisfactory and where so much is needed and so much more would be desirable to have, it is easy to build up a statistical program of imposing, not to say overwhelming proportions. That has always been the problem when the subject of improving construction statistics has come up. If a solution of the problem was to be attained, it was necessary to agree upon priorities, since the whole was obviously beyond present practicality. There I echo the remarks made by Dr. Burgess this morning.

After years of study and discussion, it is now generally agreed among both Government and private economists that first priority should be given to what may be referred to as policy statistics, that is, to those series that are the most helpful in measuring and foreseeing changes in economic conditions and hence in guiding economic policy.

The first step in giving effect to this decision was the revision in the methods of estimating housing starts, which was made possible, as I have mentioned earlier, by a special appropriation last year for the Bureau of Labor Statistics.

Now, I should like to take advantage of Congressman Bolling's implied invitation this morning to try to sell a statistical program.

The second step in getting an improved system of statistics is up right now before the Congress. It consists in a number of improvements to the activity series and related statistics as embodied in a joint program for the Bureau of Labor Statistics, the Bureau of the Census, and the Business and Defense Services Administration. This program, which has been carefully designed with a view to obtaining at this time only the most crucially needed data, was developed in consultation with other Government agencies and with labor, business, and financial organizations, and has, I understand, the full support of these groups. Much of the testimony that has been given and the other material presented at these hearings testify to that statement.

The program includes: Improvements to the estimates of construction expenditures, data on expenditure for maintenance and repair improvements in data on the production of building material and on the requirements for materials and labor in various types of construction, residential vacancy statistics, and a survey of residential builders' organizations and operations. The program is now before the Congress in the form of a special appropriation to be apportioned among the three agencies referred to. I should say more correctly it is before the Appropriations Committees of the Congress.

Legend

[ ] → New Program

[- - -] → Expanded Program

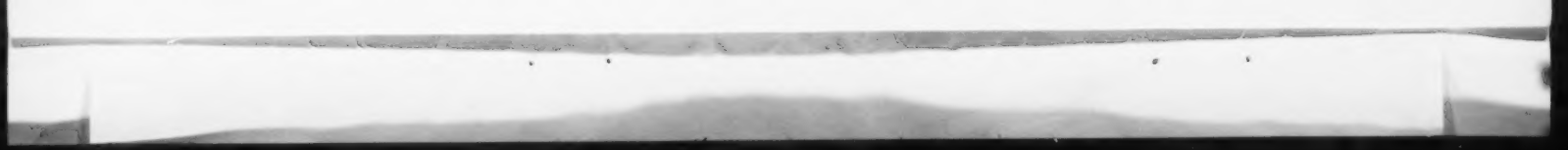
LABOR-COMMERCE CONSTRUCTION STATISTICS PROGRAM

Sources and Methods

I. Outline of a joint program for measuring construction activity

Type of construction	New construction		Alterations and repairs
	Basic data	Value put in place	
Private construction			
Residential	**Bureau of Labor Statistics** Monthly estimates of housing starts, based on permit reports plus field surveys. "Total building authorized" reports provide permit valuations for all types of construction by State and region.	**Bureau of Labor Statistics** Estimated by application of time factors to value of work started.	**Business and Defense Services Administration** [Field surveys of sample of owner and renter-occupied residential properties.]
Nonresidential (Except public utilities and farm construction)	**Business and Defense Services Administration** [- - - Contract awards. - - -] **Bureau of Labor Statistics** [- - - Building permits. - - -] [Field surveys in sample areas to obtain data on small projects.]	**Business and Defense Services Administration** [Mail reports for large projects. Individual estimates for groups of medium-sized projects, based on standard patterns. Estimates for small projects derived by application of standard patterns.]	**Business and Defense Services Administration** [Field surveys of sample of commercial, industrial and institutional establishments.]
Public utilities	**Business and Defense Services Administration** [- - - Contract awards, reports from regulatory agencies, utilities	**Business and Defense Services Administration** [- - - Progress reports or data on actual expenditures.	**Business and Defense Services Administration** [- - - Data from regulatory agencies, utilities and trade associations

	Contract awards, reports from regulatory agencies, utilities and trade associations.	Progress reports or data on actual expenditures. Estimates based on standard time patterns.	Data from regulatory agencies, utilities and trade associations.
Farm	Bureau of Labor Statistics Field surveys in sample areas.	Bureau of Labor Statistics Estimates based on typical time patterns, obtained from field surveys.	Business and Defense Services Administration Estimates, based on trends in farm incomes and consumption of lumber, applied to benchmark surveys.
Public construction			
Federal	Bureau of Labor Statistics Reports from Federal agencies.	Bureau of Labor Statistics Reports from Federal agencies. Estimates for some Federal programs not covered by agency progress reports.	Bureau of Labor Statistics Reports from Federal agencies.
State and local	Business and Defense Services Administration Field sample surveys for small projects and force-account work. Contract award notices from F. W. Dodge, etc. Listings from BLS permit reports.	Business and Defense Services Administration Mail reports for large projects. Individual estimates for groups of medium-sized projects, based on standard patterns. Estimates for small projects derived by application of standard patterns.	Business and Defense Services Administration Reports from States, large cities and sample of smaller government units.



I have appended to this testimony a diagrammatic analysis of the construction statistics that the Government would be providing if this program were approved. The diagrams list and briefly describe each of the series, show whether it is an existing one to be carried on without change, a revision of an existing series, or a new one, and indicate the agency to which the funds will be allocated.

I should like to have the diagrammatic analysis made part of the record.

Representative TALLE. Without objection, it is so ordered.

LABOR-COMMERCE CONSTRUCTION STATISTICS PROGRAM

II. Essential related components in the joint program

Type of information	Agency and method	Uses of information
Building materials production indexes.	Business and Defense Services Administration: The index will be expanded to include 9 important building materials. Arrangements will be made to have the Census Bureau initiate collection of shipments data for these materials.	By increasing the coverage, these data will improve the reliability of the index which is used to measure current trends in the level of production of the building materials industries.
Labor requirements for construction.	Bureau of Labor Statistics: Analysis of contractors' payrolls on typical projects, to develop estimating factors showing number of man-hours, by occupation, required for given amounts of value-put-in-place.	Labor-value estimating factors are needed for computing labor requirements for future construction programs; estimating labor recruitment needs; incoming employment potentials of public works programs.
Materials requirements for construction.	Business and Defense Services Administration: Materials requirements data for typical projects in all major types of construction will be developed by analyzing construction plans, bills of materials and other data, involving engineering and accounting techniques.	Analyses of the amounts of the various kinds of materials which are required in the construction of different types of building are necessary for: (1) an evaluation of the economic stabilization potentials of the construction industry, (2) for determining requirements in connection with mobilization planning, and (3) for market analysis by the building materials industry.
Residential builders' operations.	Bureau of Labor Statistics: Annual survey of nationwide sample of residential builders, to determine annual volume of production, sales and financing experience, type of houses built, land holdings, future plans, etc.	To measure the effects of Federal credit regulations on the housing industry and its capacity to produce. To determine what factors are most important in obtaining an adequate volume of housing in the needed sizes and types and at reasonable prices.
Residential vacancies.	Business and Defense Services Administration. Semiannual field surveys in a rotating sample of metropolitan areas to obtain current measures of residential vacancy rates.	One of the most important missing elements in the analysis of local housing markets is a current measure of vacancies. Such a measure is essential not only for the home builders themselves, but also for the governmental and financing agencies concerned.

Mr. COLEAN. I should like also to make part of the record the official description of this program as presented to the Appropriations Committees by the Department of Commerce and the Department of Labor, if that is appropriate.

Representative TALLE. Without objection, that will be done.

(The official description of the program as presented by the Department of Commerce and the Department of Labor follow:)

UNITED STATES DEPARTMENT OF COMMERCE PROGRAM OF IMPROVED CONSTRUCTION STATISTICS

GENERAL JUSTIFICATION

Accurate and timely construction statistics are of vital importance to a number of Federal Government agencies in making sound public policy decisions on matters such as the following: Fiscal and monetary policy; Federal Reserve credit policy; public works programing and antirecession measures; federally insured mortgage interest rates; and defense mobilization policy. Accurate and timely construction statistics would also assist private industry to exercise initiative in a manner to facilitate a stable high-level economy. The inadequacy of the presently available construction statistics, resulting from budgetary limitations, is recognized by the Council of Economic Advisers, the Federal Reserve Board, the Joint Committee on the Economic Report, and other agencies. In view of the changing economic conditions, the Department of Commerce has been experiencing strong and increasing pressure from other Government agencies and from trade associations, as well as from numerous private business firms, to improve the reliability of these figures immediately. In order to satisfy these immediate needs of Government and industry, the attached construction statistics program and minimum budget estimates have been prepared to do this difficult and complex, but urgently necessary, job.

President Eisenhower made the following statement in his letter of transmittal to the Congress (dated January 28, 1954) which accompanied the Economic Report of the President:

"Government must be alert and sensitive to economic developments, including its own myriad activities. It must be prepared to take preventive as well as remedial action; and it must be ready to cope with new situations that may arise. This is not a start-and-stop responsibility, but a continuous one."

In order for Government to be "alert and sensitive to economic developments," accurate and timely construction statistics are indispensable, since total construction activity (new construction and alterations and repairs) accounted for about 13 percent of the 1953 gross national product.

Construction provides for the direct employment of about 4 million persons in work at the site, and, it is estimated that as many as 4 million more are employed in the distributing, transporting, manufacturing, mining, lumbering, and other activities dependent upon construction. The total of at least 8 million is over 13 percent of the total employment in the country.

Construction uses more raw materials than any other single form of economic activity. Practically all of cement, gypsum, and clay products are devoted to construction. New construction and maintenance take annually almost two-thirds of the lumber consumed by all the Nation's industries, about one-sixth of the iron and steel, one-fifth of the lead, zinc, and aluminum, and one-third of the copper. Bituminous products, plastics, paint, rubber, stone, glass, vegetable fibers, all find major markets through construction activity.

In 1953 new construction accounted for over 45 percent of our total private domestic investment.

Accurate and timely construction statistics are of vital importance to Government in making sound public policy decisions on such critical problems as:

1. Anti-recession measures such as public works programing
2. Federal housing policies and programs
3. Defense mobilization planning
4. Federal Reserve credit policy
5. Federal fiscal and monetary policy
6. Consumer credit controls

Accurate and timely construction statistics would also assist private initiative and thereby contribute toward the maintenance of a stable high-level economy. Construction statistics are used by industry for:

1. Guiding investment policy
2. Market research and analysis
3. Sales and advertising planning
4. Pricing policies
5. Production scheduling

In spite of their importance, however, we have ample evidence that available construction statistics are, to a large degree, in accurate and incomplete, so that, at a critical juncture in current economic developments, Government and

industry do not have reliable and adequate information. The inadequacy of the presently available construction statistics, resulting from budgetary limitations, are widely recognized. For example, the housing and construction panel of the Intensive Review Committee of the Bureau of the Census appointed by the Secretary of Commerce stated that:

"Finally, the panel recognizes that appropriations for basic and current housing and construction statistics have been sharply reduced for several years to the point that available data are unquestionably inadequate and, in fact, a threat to the formulation of sound public policy."

The subcommittee on construction statistics of the Chamber of Commerce of the United States pointed to the inadequacy of construction statistics as follows:

"* * * at no time has the Government's statistical information about construction been of high dependability and today the quality of figures is poorer than at any time in the postwar period.

"This unfortunate condition is not due to lack of competence in the Government's statistical agencies, which are doing the best job that can be done with the resources available. It is due, rather, to the failure of Congressmen and businessmen either to recognize the importance of sound data * * * or to recognize just how inadequate the present data are * * *"

The need for accurate Government statistics is the more pressing because of the characteristics of the construction industry. Construction is to a large extent small business. Aside from agriculture, perhaps no other major activity is so widely represented by the small operator. Such a decentralized industry, because of the very range and variety of its interests, cannot support adequate facilities for providing basic statistics about its operations. If this essential information is to be provided, the job must be done, as it is for agriculture, by Government.

In the present situation the recognized inadequacies of these statistics have created a virtual emergency. As a consequence the Department of Commerce has been urged to take immediate steps toward eliminating the major weaknesses in the series. These recommendations have come from a number of Government agencies, from trade associations, building material manufacturers and builders, as well as from numerous other private businesses.

The proposed supplemental program described below represents the minimum increase needed to provide only the most essential and basic data required in the present situation.

SUMMARY OF PROGRAM

The principal objective in developing this program has been to provide accurate statistics for use in public policy decisions such as antirecession measures and defense mobilization planning, and for use in private policy decisions by industry and labor.

The overriding consideration underlying the selection of data sources and development of methods has been to establish primary data collection instead of placing reliance on secondary sources of unknown, unverifiable, or questionable reliability. The work-steps have been planned so that certain data important to private industry could be obtained as byproducts, at minimum additional cost.

This program consists of five projects. The major results to be achieved by each project are described below:

I. New construction activity

Substantial improvement in statistical sources and methods will result in reliable national and regional estimates of new construction expenditures, by major type of construction. These improvements will result in a market increase in the accuracy of estimates of construction expenditures for the following: Industrial, commercial and other types of private (nonresidential) construction; public construction by State and local governments; public utility construction; and farm construction.

II. Alterations and repairs

Replacement of fragmentary data with estimates based on reliable samples will markedly improve the accuracy of the statistics. Alteration and repair expenditure estimates will become available for all major categories of construction, on a quarterly instead of an annual basis, for major geographic regions, and by metropolitan and nonmetropolitan location.

III. Building materials production index

It is planned to increase the reliability of the building materials production index by initiating the collection of current production data for the following important materials: Concrete products, flat glass, asphalt floor tile, builders' hardware, metal doors and windows, mineral wool, aluminum roofing and siding, convectors and asbestos cement products. In addition, production data for paints and varnishes, plumbing fixtures, building boards, and heating equipment which are now available will be modified to make them suitable for inclusion in the index.

IV. Materials requirements

Analyses will be made of the amounts of the various kinds of materials which are required in the construction of different types of building. These factors will be useful for: (1) an evaluation of the economic stabilization potentials of the construction industry, (2) for determining future requirements for mobilization planning, and (3) for market analysis by private industry. The results will show the quantities of various important materials which are required, per million dollars of construction value, for the different types of construction.

V. Residential vacancies

An important indicator of demand for construction will be made available by the provision of semiannual data showing vacancy rates of existing residential construction for 15 major metropolitan areas, geographic regions and nationally.

Byproduct improvements

State and regional estimates.—Reestablishment and market improvement in the accuracy of regional and State geographic breakdowns of new construction will result from the improvements in statistical sources and methods for the various components of new construction which were outlined above and also from concurrent improvements in the methods of estimating new residential construction which are being made by the Bureau of Labor Statistics. These figures will help to meet the insistent demand of private industry for construction figures on a geographic basis, useful for market analysis purposes.

Forecasts of future construction activity.—With improved accuracy of current construction activity estimates, and with additional data made available under these procedures, there will also be a comparable improvement in the national estimates of future construction activity. With marked improvement in the accuracy and availability of data on a geographic basis, forecasts of future construction for States and regions could also be made. These estimates of the outlook for future construction would be invaluable to private industry for sale and advertising planning, production scheduling and other policy decisions.

PROPOSED IMPROVEMENT IN METHODS FOR MEASURING CONSTRUCTION ACTIVITY

I. New construction activity

(a) Private nonresidential and State and local public construction.—The BDSA will obtain a record from a number of sources of every large construction contract awarded in the United States ($100,000 and over). For private nonresidential construction, continuing field sample surveys will be conducted in nonpermit places and adjusted building permit data will be summarized to provide current reports on the many thousands of small construction projects started, valued at under $100,000 each. These verified records will replace the arbitrary adjustments to compensate for omission of small contract awards, and to estimate work started in the 11 Western States. Sample surveys will be made of the many thousands of State and local governmental jurisdictions to cover contract awards for small projects and for all force-account construction.

To get actual expenditures, or the "value of work put in place" each month, the BDSA will develop a system of individual progress reporting from builders for large construction projects, and sample mail surveys for smaller projects. This will largely replace the use of the technique of activity patterns. The Bureau of Labor Statistics will make mail surveys of permit-issuing jurisdictions to determine types of construction excluded from permit coverage, methods of enforcement, etc., and field sample surveys to check adequacy of permit coverage, rate of permit lapse, actual cost vs. permit valuations, starting and completion dates of projects, etc.

(*b*) *Public utility.*—Analyzing and summarizing monthly financial reports filed by utility companies with the Federal and State regulatory agencies; and refining monthly progress report data obtained directly from trade associations, individual utilities and nonregulatory governmental agencies, will yield monthly expenditure data for all major classes of public utility construction. This work will be done by the BDSA.

(*c*) *Farm.*—The sample of areas used for the purpose of supplementing the building permit coverage for small projects in each State, will be selected to give adequate representation to the areas in which farm construction occurs. Thus, new farm construction will be derived by the Bureau of Labor Statistics from its quarterly sample field surveys.

II. Alterations and repairs

Quarterly sample field surveys by the Bureau of the Census will be used to develop estimates of alterations and repair expenditures for all major categories of private construction. Federal Government figures will be obtained by BLS from financial records of Federal agencies. Sample surveys of State and local governments by the Census Bureau will yield data for the non-Federal public segment. Public utility estimates will be derived from financial reports to the Federal regulatory agencies (ICC, FTC, etc.) supplemented by sample studies by BDSA and census.

III. Building materials production

It is planned to extend the coverage of this index by having the Census Bureau, as part of its facts for industry series, collect monthly (or quarterly) production and shipment data for 9 important building materials for which current reports are now lacking, and to modify data which are now being collected for 4 additional materials.

IV. Materials requirements (new series)

The development of materials requirement data for typical projects will be done by the BDSA and will require analysis in the field of construction plans, bills of materials and other data, involving engineering and accounting techniques. It is anticipated that materials requirements for all major types will be covered in a continuing program over a 5-year cycle.

V. Housing vacancies (new series)

It is proposed to have the Bureau of the Census conduct semiannual sample field surveys to obtain current characteristics and measurements of residential vacancy rates by regions, for 15 metropolitan areas, and for the United States.

Mr. COLEAN. The institution of this program would result in a great enhancement of our knowledge of the industry we are dealing with and its current activities. It would, for the first time, give us confidence in our measurements and a solid basis for policy judgments. In relation to the benefits, the cost, at about $1.1 million, is a modest one. We are talking about a $50 billion industry.

With this accomplished, we should begin to consider filling other serious gaps in our data. A sample housing census, taken next year, would be highly desirable, considering the vast change in the housing inventory since 1950, and I believe that is now being considered by the Bureau of the Census.

A survey of the characteristics of the housing currently being produced should also be given attention; and, as soon as possible, work should be commenced on an authoritative cost index.

It has sometimes been suggested that the construction industry might itself provide more of the data needed in this area. It should be noted that a great deal of data already is compiled by private agencies, and it is practicable in certain specialized areas for more to be done in the future. Where variable privately compiled data are available, they should, of course, be utilized to the fullest possible extent. Nevertheless, the construction industry is not the kind of

homogeneous entity that could, on its own initiative and through its own devices, produce the variety and balance in data that are needed.

Even if it were possible for industry to carry the full burden—as certainly is not the case—it is doubtful that it would be desirable, so far as the basic policy statistics are concerned. These statistics are so involved with the public interest that Government is well-justified in assuming the responsibility for them. In assuming this responsibility, however, Government on its part must take precautions to assure objectivity and veracity and to avoid the shading of facts to justify political action or to give a good face to an administrative operation.

The compilation of policy statistics, in other words, should not be placed in the hands of agencies charged with carrying out policy. The Bureau of Labor Statistics, the Bureau of the Census, and the Construction Division of BDSA all have fine records for objectivity; and, if construction statistics are kept in their hands, there will be no question that the job done will be as competent and dependable as the resources at their disposal permit.

Thank you very much, Mr. Chairman.

Representative TALLE. Thank you, Mr. Colean.

The Chairman will state that one organization not represented here among the panel speakers has requested that a paper be inserted in the record. That will be done in so far as it is practicable for that organization and others. It is only fair to say, however, that some of this material may have a more definite application to subsequent hearings which this committee plans to hold. I make that announcement at this time. Without objection it will be so ordered.[1]

We will now hear Mr. Rensis Likert, Director of the Institute for Social Research and professor of psychology and sociology, University of Michigan.

Dr. Likert.

STATEMENT OF RENSIS LIKERT, DIRECTOR OF THE INSTITUTE FOR SOCIAL RESEARCH AND PROFESSOR OF PSYCHOLOGY AND SOCIOLOGY, UNIVERSITY OF MICHIGAN, ANN ARBOR, MICH.

Mr. LIKERT. I appreciate this opportunity to appear before you.

The subject under consideration and the topic assigned to me are particularly important.

If the objectives of the Employment Act of 1946 are to be achieved most effectively, it is necessary to have, in addition to the statistics now published, certain information regularly available for use by the Federal Government and for use also by industry, agriculture, labor, as well as State and local governments. The kinds of data to which I refer are measurements which would show what is happening to consumer households or spending units, how they are behaving and what the motivational forces are which are influencing their behavior. These data are important because of the great amount of discretionary purchasing power that the consumer segment of our economy has. Consumers today in the United States because of their income, liquid asset holdings, easy access to credit, and present inventories have the power to use substantial sums for the purchase of consumer goods,

[1] The inserts referred to appear at the end of the hearings (p. 335).

especially durable goods, or to withhold purchases for some period of time.

Important developments in research methodology over the past decade or two, fortunately, make it readily feasible to collect the kinds of data that are required. If all consumer units had to be contacted in order to secure the information desired, the collection and tabulating task would be prohibitively costly. The sample interview survey, however, makes it possible to collect and analyze the required data at a very nominal cost compared to the value of the results.

Since the information obtained from individual consumer spending units can be analyzed and interpreted in different ways, the results from a sample survey can be used to secure several different kinds of measurements. Averages can be computed, and aggregates or totals can be estimated; but even more valuable as a rule are the distributions that can be prepared which show the proportion of all spending units which fall into particular categories.

The kinds of data about consumer units which can be rapidly collected by means of the sample interview survey are of five broad types. On each type of data sample surveys can obtain results to show what the current situation is, what changes have occurred in the recent past and why these changes have occurred.

The five types of data from consumers which can be processed in these different ways are briefly as follows:

1. Economic status data including such items as income; accumulated assets or savings, as well as amount held of various kinds of savings; amount of debt; extent of ownership of durable and nondurable goods and the condition of these goods.

2. Economic behavior data including major purchases and expenditures, amounts withdrawn from or added to savings, and so forth.

3. Information and misinformation data: These include measurements of the level of knowledge which people have of the state of our economy, existing trends in the economy, how the economy functions and similar results. Most people have only very limited knowledge on national economic matters and on how our economy functions. Widespread knowledge or lack of knowledge on economic matters is an important factor in consumer behavior and must be taken into account in estimating future consumer behavior.

Take, for example, such people as the respondent who after the end of price control in 1946 was asked:

> Now that price control is over, has it made any difference in how you feel about war bonds?

She answered by saying:

> No; it hasn't * * * oh, I see what you mean. Bonds are a better buy now than ever. They are the only thing that hasn't gone up in price.

That is not unusual.

4. Motivational and pyschological variables: These include such variables as attitudes and opinions; intentions to buy; expectations as to the goodness—or badness—of the times ahead in general and for the individual personally; and income and price expectations. Included also are other variables which influence buying or savings behavior such as the social or economic groups with which the consumer

identifies himself and which he proposes to emulate, and the resulting economic goals that he has.

5. Demographic variables such as family size, education, age, size of community, geographical region, and so forth.

It may be useful to discuss some of the above types of data and the statistics which can be obtained and then to comment briefly on the very important results which can emerge from scientifically sophisticated analyses of these variables.

I would like to underscore again what Dr. Kyrk and others have mentioned here this morning about the importance of adequate analysis of data collected.

Tabulations of data involving consumer economic status and behavior variables are often called microeconomic data in contrast to macroeconomic data which involve large economic aggregates. Much of the available economic statistics, and practically all that is reported in Economic Indicators, concerns large economic aggregates. Examples are the data on level and change of national income, of consumption expenditures, or of consumer credit. In order to understand what is happening in our economy and to predict probable forthcoming shifts, these statistics are of the greatest significance but, nevertheless, they need to be supplemented by further data. Specifically, data are needed showing frequency distributions of consumer economic data. These are required to supply the answers to such questions as the following:

In a given year in which national income increased by 5 percent, how many families had an increase in income, how many had stable incomes, and how many had a decrease in income? In a year in which consumer credit increased by 10 percent, how many more families borrowed money than in the previous year? In a year in which consumer bank balances or liquid assets remained stable, how many families added to their bank accounts and how many reduced them? In a year in which consumer spending on automobiles and other durable goods declined by 5 percent, what proportion of families increased and what proportion decreased their expenditures on durables? Furthermore, we need not only data on the distribution and changes in income, borrowing, assets, and spending among American families, but we have to know also the kinds of families whose income, assets, or spending increased or decreased. An aggregate change—in income, for example—will signify one conclusion or another depending upon how the change is distributed among various parts of the population.

The methods of collecting data on frequency distributions of economic data differ from the methods used in compiling statistics on large economic aggregates. The latter are usually compiled from existing records. The former are obtained by contacting, through sample surveys, the people themselves, those who make decisions to save and to spend.

Fortunately, due to farsighted leadership on the part of the Board of Governors of the Federal Reserve System, the sample interview survey has been used since 1946 to collect microeconomic as well as attitudinal data from national samples of consumers. The Surveys of Consumer Finances are sponsored by the Federal Reserve Board and carried out by the Survey Research Center for and in cooperation with the Board. Thanks to these surveys the answers to all the ques-

tions just mentioned are determined each year. But the amounts spent on collecting microeconomic statistics are still rather limited—in fact, very limited—and therefore the data available are far less than would be desirable. For example, may I call attention to our lack of knowledge about the distribution of consumer saving. It would be very useful in attempting to implement the Employment Act of 1946 to know in which population groups the savers and the dissavers—that is, those who spend more than their income—are concentrated and the extent of this concentration.

I think also these studies can help in clarifying the concepts that are used in some of the aggregate statistics and help to make comparable the frequency distribution data and the data on such things as savings, debt, and so on, that appear in the aggregates.

I should like, therefore, to suggest that your committee may wish to examine the microeconomic data that are regularly available through the Surveys of Consumer Finances and similar sources and include some of them at least annually in Economic Indicators. This would add to this important publication frequency distributions of those consumer economic variables most related to the objectives of the Employment Act. I would think, for example, that it would be useful to include annually frequency distributions of consumer income as well as such distributions as those showing (*a*) the ownership of various amount of liquid assets by income groups; (*b*) the size of short-term indebtedness by income groups; (*c*) the amounts spent on the purchase of durable goods by income groups.

By calling attention to existence of these statistics and pointing to their value, I believe you will increase their usefulness. I hope you will also consider what may be done to facilitate the collection of other statistics not now available but urgently needed, such as those on the distribution of consumer savings.

Relatively crude measures of consumer motivation have already demonstrated their value in contributing to the objectives of the Employment Act of 1946. Thus, for example, the following material from Psychological Surveys in Business Forecasting, a report of a seminar conducted by the Foundation for Research on Human Behavior, Ann Arbor, Mich., 1954—prepared by George Katona for the recent seminar held by the Foundation for Research on Human Behavior—cites evidence on the value of these motivational measurements.

> Such economic factors as income, liquid-asset holdings, and what kinds of people owe how much money have a very important influence on consumer behavior, of course, but they are by no means the only influential factors. Also of great importance are the motivational forces through which economic factors must operate before they can affect economic behavior.
>
> From among the many attitudes that people hold, a number have been selected for study. The data presented here are in part taken from the surveys of consumer finances, conducted by the Survey Research Center for the Federal Reserve Board since 1946; these provide the longest series of data on the financial attitudes of consumers. Other data are taken from the Interim Surveys of the Survey Research Center, which provide more detailed information about attitudes than do the Surveys of Consumer Finances.
>
> Many forecasters predicted that a serious depression would occur at the end of World War II, as war orders fell off rapidly. Others held that disastrous inflation was in the making, because of the relaxation of wartime controls and the existence of tremendous holdings of liquid assets. A survey of consumers in 1946 supplied information which, with hindsight, we can see as the essential missing link needed to interpret correctly the undisputed facts about declining

war orders, diminished wartime controls and large holdings of liquid assets. Consumers, it was found, looked forward to a high and rising standard of living; they were willing to spend freely out of income, but they did not intend to finance their purchases out of accumulated savings. Their liquid-asset holdings—large amounts of war bonds, savings accounts, and checking accounts—were viewed primarily as emergency funds. These attitudinal facts from the consumer sector indicated firm support to the economy but no excessive inflationary pressures; and as is well known, neither the prophets of depression nor of excessive inflation were right.

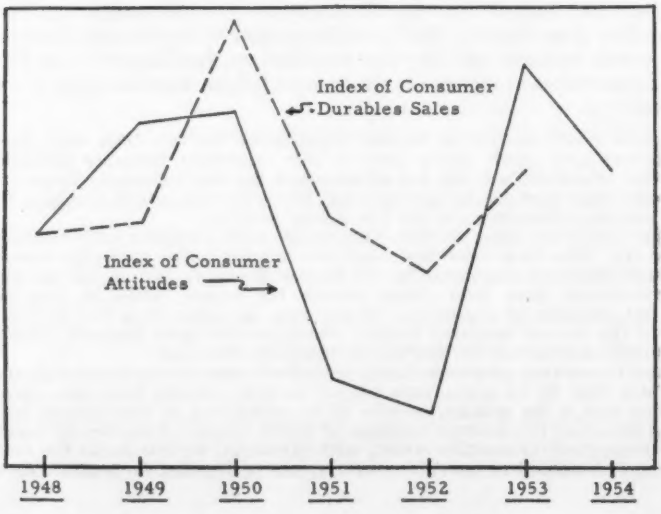
At the beginning of 1949, many persons again predicted a major depression. Business had begun to slacken, and numerous forecasters said that the postwar "pent-up demand" was exhausted and that the current "inventory recession" would spiral into a full-fledged depression. A survey of consumers at that time showed, however, that consumers did not share the pessimism of the forecasters and the business community. Their satisfaction with their own financial positions resulted in an increase in total consumer expenditures in 1949 over 1948, and the effects of the "depression" were limited to inventory runoffs.

Chart 1 shows a simple unweighted index of six indicators of consumer attitudes, on an arbitrary scale with 1948 as the base. This index is plotted as a solid line, with the point for 1949 showing that there was a substantial increase in the optimism of consumers from early 1948 to early 1949, a smaller increase from 1949 to 1950, and so forth. The dotted line shows the Commerce Department's series on durable goods expenditures, as available a year later than the attitudinal data. In every year, the change in the index of consumer optimism, as determined at the beginning of the year, correctly indicated the direction of change in subsequent sales of durable consumer goods; the magnitudes of the changes do not show very close agreement with the Commerce series, however. (The durable goods series was selected for comparison with the index of consumer optimism because it measures consumer behavior of a kind that fluctuates relatively widely.)

(The Index of Consumer Attitudes is an unweighted average of six indicators, taken from the Survey of Consumer Finances, conducted by the Survey Research Center for the Federal Reserve Board. The six indicators are "expect to buy a car," "expect to buy a house," "expect to buy major household appliance,"

CHART 1

CONSUMER ATTITUDES HAVE LED PURCHASES OF DURABLES, BUT THEY HAVE NOT INDICATED THE MAGNITUDE OF CHANGES WITH ACCURACY



"feel better off financially," "good time to buy," "optimistic about 1-year business outlook.")

(The Index of Consumer Durables Sales is the Department of Commerce's series on durable goods expenditures, in constant dollars, covering the entire year, adjusted to a per capita basis.)

At the beginning of 1950, consumers were a little more optimistic than they were in 1949; sales of consumer durables, however, took a big jump for the year as a whole because of the outbreak of the Korean war in June.

At the beginning of 1951, consumer attitudes were once again at variance with the consensus of forecasters. Most analysts at that time expected the inflationary pressures of late 1950 to continue. The mood of consumers, however—as shown by this index and by other data from the Survey of Consumer Finances—presaged a sharp downturn in buying. The survey showed widespread resentment of recent price increases and of high prices; people felt worse off because of increases in prices and increases in taxes; there was general anxiety and discomfort and the expectation of a prolonged cold war. The inflationary pressure which most forecasters expected from the consumer sector did not materialize; and purchases of consumer durables dropped sharply.

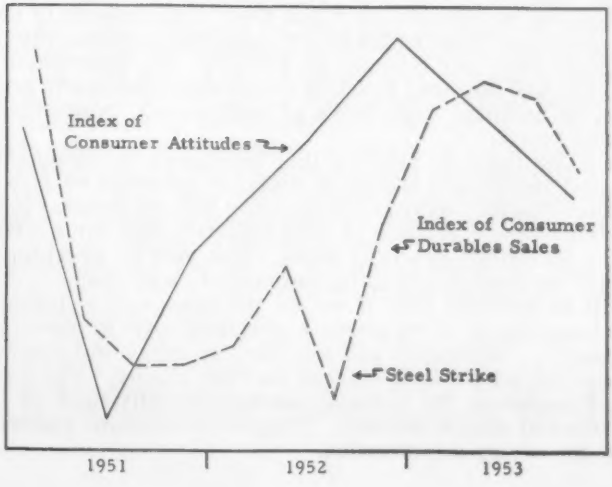
The attitudinal index agreed with the direction of change of the durables index again in 1952 and 1953; and, again, the relative magnitude of the changes showed only modest agreement.

Chart 2 shows another index of consumer attitudes, taken from the Survey Research Center's Interim Surveys, which have been conducted about twice a year during the last few years and which obtain more attitudinal information than do the Surveys of Consumer Finances. This index is charted along with the Commerce Department's durable goods expenditures series. June 1951 was the low point of inflationary pressures from the consumer sector. The survey showed that few consumers expected large price increases and that fears of shortages were nonexistent. In addition, many consumers felt that, financially, they were worse off than they had been, and that prices were too high. These and other results from the survey prompted the prediction that the current buying lull would last for some time—and it actually lasted for another three quarters.

The surveys of November 1951, June 1952, and November-December 1952 indicated a steady upward trend in the strength of consumer buying. The index of consumer durables sales followed the trend of the surveys, with a lag of 4 to 6 months, except during the period of the steel strike in 1952.

CHART 2

THE LEAD OF CONSUMER ATTITUDES OVER DURABLES PURCHASES IS ALSO APPARENT FOR QUARTERLY DATA



(The Index of Consumer Attitudes is an unweighted average of five indicators, taken from the Survey Research Center's Interim Studies at the dates shown. The five indicators are "feel better off financially," "optimistic about 1-year business outlook," "optimistic about 5-year business outlook," "feel that the cold war is good for business," and "good time to buy.")

(The Index of Consumer Durables Sales is the Department of Commerce's series on durable goods expenditures, in constant dollars.)

Mr. LIKERT. These results indicate, it seems to me, the potential value of measurements of the motivational forces influencing consumer behavior. The accomplishments to date, in my judgment, represent a mere beginning. Extensive further research is urgently needed. This research should not consist merely of continued collection of micro-economic data or of data on consumer motives and attitudes. I would like to underscore what Dr. Gainsbrugh said this morning that what we need is methodological studies and basic research into the origin and function of consumer motives and expectations and of their influence upon economic behavior. Such research is needed to discover which motivational forces are most important and how they can best be measured. Extensive analyses also need to be made of the relationships between economic status factors, motivational and informational factors, and the subsequent economic behavior of consumer spending units.

There is, therefore, great need for extensive research using this relatively new approach to economic statistics, namely, that of relating economic and psychological variables. A significant fact about human behavior is that it is motivated and that prior to any change in behavior there is a change in the motivational forces acting upon the individual. This is as true for economic behavior as for other behavior and gives us a powerful approach to estimating probable changes in our economy.

This combined economic and psychological approach can, in my judgment, yield two important kinds of information. Since changes in motivation occur prior to changes in behavior, motivational forces acting upon consumers will generally change sometime prior to changes in consumer behavior, as these two charts have suggested.

Consequently, measures of these motivational forces will usually give prior indications of any change in consumer behavior. A second important kind of information which these measurements of motivation can yield is evidence on the factors influencing consumer behavior, and through them our economy as a whole. An understanding of these factors and how they function will enable constructive action to be taken to maintain high levels of employment, production, and purchasing power.

There is nothing more practical than basic research: by developing, testing, and verifying a theory of consumer behavior we may make much faster progress toward understanding how our economy operates than by numerous operations of data collection that are intended to fulfill the immediate practical needs. The goal of providing adequate tools for the understanding and prediction of economic fluctuations will be achieved only if we act the same way as the natural sciences have, that is, if we devote a substantial part of our efforts to basic research. Economics and all social or behavioral sciences receive, however, far too little support for basic studies. The National Science Foundation, for instance, devotes virtually none of its resources to social science research. Progress in economic statistics depends on remedying this situation.

I think about 1 or 2 percent of all of the funds that are spent for research and development in the United States goes into the kind of basic research that I am talking about here, perhaps a little less than that.

I hope, Mr. Chairman, that your committee will consider this matter and if you deem it desirable will request the Joint Committee on the Economic Report to ask the Congress, Government agencies, and the National Science Foundation to foster and support this basic research.

Finally, I should like to emphasize the value in economic statistics, as well as elsewhere, of vigorous competition. An important element of strength of our free enterprise system stems from the improvements and efficiencies which vigorous competition fosters. I do not, therefore, believe in monopoly in the collection and interpretation of economic statistics. Nor do I feel that the collection and analyses of economic statistics should be lodged in a single or even in a few Government departments. I have seen rapid and substantial improvements occur in the collection of economic statistics, along with a reduction in costs, when competition and some overlap existed between agencies. On the other hand, when statistical monopolies exist, methods long proved inaccurate and inadequate have continued to be used. Consequently, I urge that your Committee on Economic Statistics encourage the Federal Government to foster and support the collection of statistics and the conduct of basic research on economic motivation through all Federal and State agencies, universities, and land grant colleges which have the interest, competence, and determination to conduct such research.

Representative TALLE. Thank you, Mr. Likert.

Representative TALLE. We will now hear from Mr. Rosenbaum, manager, Economic Research Department, Sears, Roebuck & Co., Chicago, Ill.

Mr. Rosenbaum.

STATEMENT OF ARTHUR ROSENBAUM, MANAGER, ECONOMIC RESEARCH DEPARTMENT, SEARS, ROEBUCK & CO., CHICAGO, ILL.

Mr. ROSENBAUM. Thank you, Mr. Chairman.

Let me begin my remarks by paying tribute to the Federal statistical agencies and their personnel for their high standards of professional performance, their never-ending search for better concepts and techniques, and their willingness to listen to us so-called experts. Any suggestions I have to offer are not intended to deprecate the impressive accomplishments of the Bureau of the Census and the Federal Reserve Board in the field of retail trade statistics. I think, however, that the statistical experts in those agencies will, regardless of the merits of the points I shall raise, agree with me that the present statistical structure is imperfectly integrated with other areas of business statistics and contains various archaic features.

The first point in my bill of particulars relates to what may be called the mechanics of retail trade statistics; collecting, assembling and releasing the information.

It seems to me that there would be a definite gain in efficiency and an improvement in relations with stores requested to furnish data were a single agency to have the responsibility for collection of information. Both the Bureau of the Census and the Federal Reserve

Board are now collecting information on sales and stocks from department stores and furniture stores, and on sales from household appliance stores, auto dealers, and other stores. Presumably different samples of stores are involved and perhaps different bases for sampling. I cannot believe that there are insurmountable obstacles in the way of an arrangement between the two agencies to have all the data required by both collected by one, logically the Bureau of the Census. Integrated sample data could provide even better information on the relationship of new installment credit to sales.

The greater speed in release of monthly retail sales estimates has been of only limited application. Preliminary estimates for each retail store classification are not published until 6 weeks after the end of the sales month, and the corresponding seasonally adjusted figures are delayed an additional 1 to 2 weeks. I refer to the Monthly Retail Trade Report and to the Survey of Current Business as sources, respectively. There seems to be a tendency to regard seasonally adjusted data on retail trade as of less importance than the raw figures. Or does the fault lie in the division of responsibility between the Bureau of the Census and the Office of Business Economics, which results in the appreciable lag between the two sets of figures?

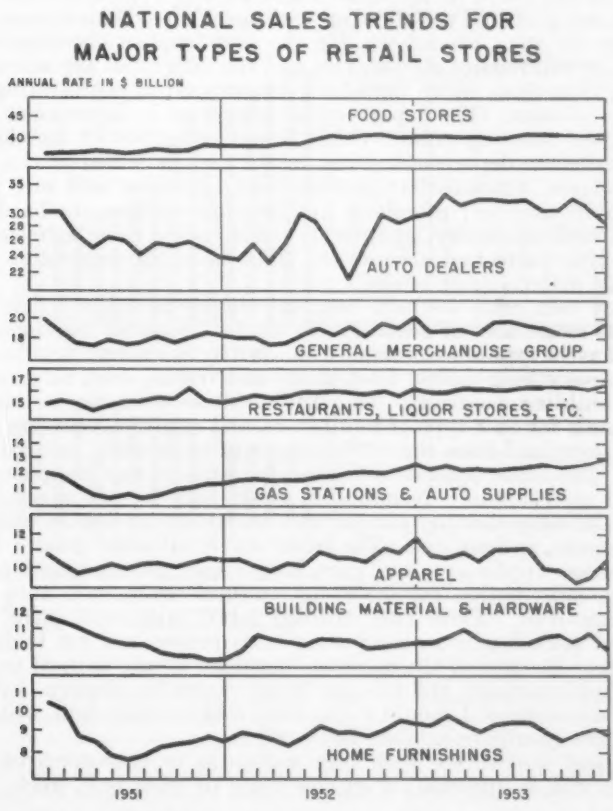
At times one will find reference in daily trade papers to statistical reports several days prior to their arrival in the mail. These articles, with annoying frequency omit the particular figures one is after. I wonder why there should be more than a day's difference between mention of a report in a newspaper and receipt of the report itself, allowing for the fact that the newspaper is located closer to Washington than my office. The foregoing observation incidentally is not confined to reports on retail trade.

I come now to the heart of my criticism of the statistics on retail trade, which deals with the conceptual approach. Its starting assumption is that our economic organization is after all built around the satisfaction of personal wants. Those goods and services which directly satisfy personal wants are described as consumer goods and services. The importance of these goods and services in the total economic picture is underlined by the fact that to facilitate the production of these goods and services, industry itself becomes a large consumer of goods and services. But note well that consumer spending and consumption, now and anticipated, sets the tempo for the vast bulk of our production machinery, barring wartime conditions.

If the retail stores are the link between the ultimate consumer and the producers of goods, the records of their sales and inventories may be made to yield even more valuable information on the changing nature of consumer preferences for goods than is now being extracted. The reporting of sales by type of retail establishment, which is the current practice, is only a crude attempt to report sales data for a much more meaningful classification—by type of merchandise. The constant shifting and overlapping of merchandise lines among the different types of stores renders it a very difficult task to trace the fluctuations in consumer demand for and retail stocks of the various broad categories of goods, from the data now made available. In 1952 sales of the apparel store group totaled $10.6 billion, only half of total consumer purchases of shoes, clothing and accessories of $20.4 billion, as computed by the National Income Division of the Department of Commerce. Sales of the food store group, which

included a substantial portion of nonfood items, totaled $39.8 billion, but consumers spent $54.5 billion for food excluding restaurant meals. Tire, battery, and auto accessory dealers rang up $1.9 billion for sales and service charges, which was less than the wholesale value of the domestic automotive replacement parts and accessories market of $2.2 billion. Household appliance, radio, and television dealers accounted for perhaps not much more than half of the total sales of household appliances, radios, and television sets. I cite these figures to show how the sales-by-type-of-store breakdown do not furnish reliable information on sales by type of merchandise. Exhibit A, attached to this presentation, nominally a graph of sales trends by type of store, is an oblique attempt to show sales trends by type of merchandise.

EXHIBIT A



Sales trends for each of various categories of retail stores are compared in the above chart. The data plotted are based on seasonally adjusted figures published by the Department of Commerce converted to annual rates. It is assumed that sales trends for the principal classes of merchandise handled by each would show a similar pattern. One important conclusion which may be drawn from the chart is that retailers of General Merchandise have not done as well as competitors for the merchandise sales dollar, in the 3-year period represented.

In the 1948 Census of Retail Trade an analysis was made of the sales of each type of store classification according to commodity line. Similar data of 1939 were of doubtful accuracy. Due to the postponement of the census of business which was to have been conducted this year, the 1948 figures remain as the sole benchmarks for converting one set of estimates into the other. And of course there is no way to get reliable estimates of the physical or dollar volume of retail inventories by kind of merchandise from the present figures.

We need better information than we are getting about what the consumer has bought and will buy, to enable our production and marketing organizations to supply the right merchandise at the right time, decreasing the need for and likelihood of extensive inventory accumulations or liquidations. The economic gain to society from a more efficient use of its resources would outweigh the additional costs.

I am not prepared to follow up with specific recommendations concerning the item breakdown for the merchandise classification of sales. It will require deliberation and the difficulties are admittedly greater than those which have been encountered in enumerating sales by type of store. The departmental categories in department stores are a good starting point. Other broad categories of merchandise not handled in department stores would then be added to this list—for example, automobiles; trucks; food; gasoline and oil; paints and paint supplies; plumbing and heating equipment; hardware; agricultural machinery, equipment, and supplies; tires, batteries, and automotive parts and accessories; light building materials; heavy building materials; et cetera.

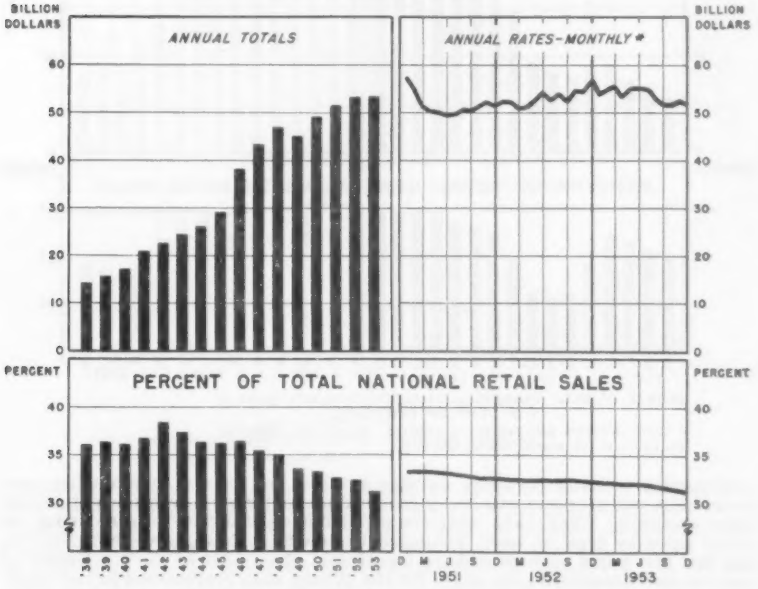
In my own office we have been calculating monthly estimates of national retail sales of general merchandise. General merchandise is defined as the type of merchandise handled by Sears and includes practically everything except food, autos and trucks, fuel, tobacco, and heavy building materials. To calculate these estimates we take the sales totals for each type of retail store, and apply percentages which were determined from the 1948 analysis of commodity sales of those stores. We make separate estimates for each of two components of general merchandise: Nondurable goods and durable goods. The former includes clothing and accessories, household textile, toiletries, paper goods, and notions. The latter covers all other goods: Home furnishings, appliances, hardware, housewares, paints, plumbing and heating, construction materials, agricultural equipment, auto parts and accessories. These two national retail sales component series are used periodically in computing sales projections for budgetary purposes. Because of the many assumptions we are obliged to make in our computations, and the age of the census benchmark, I do not have the confidence I should in the story told by these data, which are shown graphically in exhibits B, C, and D.

Of equal importance with information as to how much of what is being sold, is information on how much of what is in stock. This

immediately takes us into statistical fields outside of retail trade, namely wholesale trade and manufacturing industry, since stocks of finished goods may be found at all three levels. The inventory situation with respect to textiles and apparel may be estimated fairly well from the data reported—exhibits E and F—but for consumer durable goods the picture is completely undiscernible. Manufacturing inventories are reported without any distinction between consumer and producer durable goods.

EXHIBIT B

NATIONAL RETAIL SALES OF GENERAL MERCHANDISE



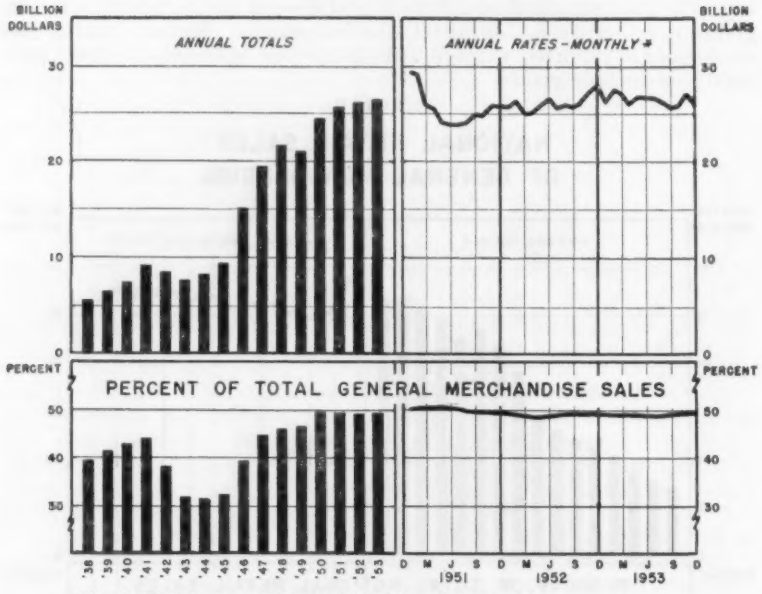
SOURCE OF DATA: Computed by Dept. 733C from data issued by U.S. DEPT. OF COMMERCE

* Dollar amounts are seasonally adjusted. Ratios are computed on basis of 12 month moving averages.

In this chart, retail sales of general merchandise are shown at annual rates monthly. "General merchandise" refers to the merchandise lines generally handled by Sears retail stores and mail order. It excludes food and beverages, autos and trucks, gasoline and fuels, tobacco, prescription drugs, books, periodicals and newspapers, heavy construction materials, and nonfood grocery items. Such sales have been declining relative to total retail sales and currently account for less than one-third share, lowest in the 15-year period. The basis for our estimates is the seasonally adjusted series on retail sales by type of store, of the Department of Commerce.

EXHIBIT C

NATIONAL RETAIL SALES OF GENERAL MERCHANDISE – DURABLE GOODS



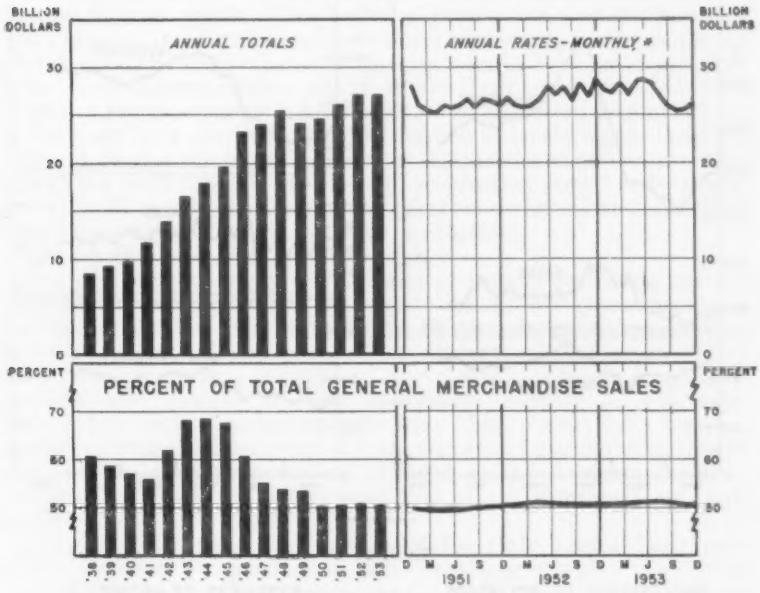
SOURCE OF DATA: Computed by Dept. 733C from data issued by U. S. DEPT. OF COMMERCE

* Dollar amounts are seasonally adjusted. Ratios are computed on basis of 12 month moving averages.

The retail sales of consumer durable goods of the general merchandise type (excluding autos, trucks, and heavy construction materials), are shown at annual rates monthly. They have been computed from seasonally adjusted data on retail sales by type of store, published by the Department of Commerce. In the last few years such sales have constituted about half of the total sales of general merchandise, a peak share for the 15-year span represented in the chart. These series are useful in calculating company sales projections.

EXHIBIT D

NATIONAL RETAIL SALES OF GENERAL MERCHANDISE—NONDURABLE GOODS



SOURCE OF DATA: Computed by Dept. 733C from data issued by U. S. Dept. of Commerce

* Dollar amounts are seasonally adjusted. Ratios are computed on basis of 12 month moving averages.

The retail sales of consumer nondurable goods of the general merchandise type (excluding food, fuels, prescription drugs, books, periodicals and newspapers, tobacco, and most nonfood grocery items), are shown at annual rates monthly. They have been computed from seasonally adjusted data on retail sales by type of store, published by the Department of Commerce. In the last few years such sales have constituted about half of all sales of general merchandise, a low point in the 15-year span of the chart. These estimates are useful in calculating company sales projections.

EXHIBIT E

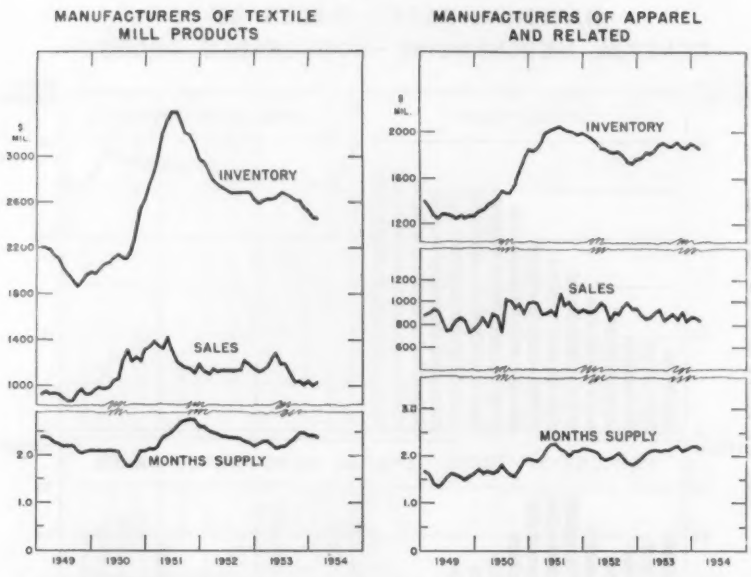
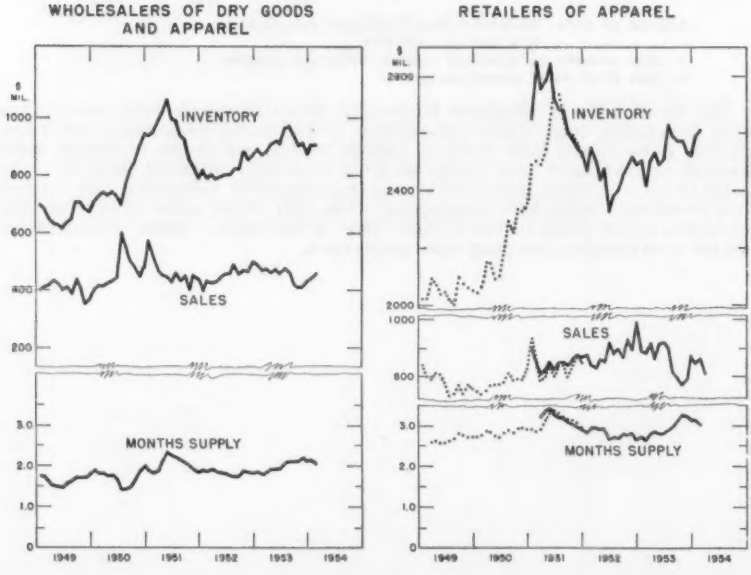


EXHIBIT F



In my office we have attempted to tackle this problem by means of a different approach. Using data from various sources on production and prices of general merchandise durable goods and separately for nondurable goods—we have computed an index of the value of production of such goods. This index of production and the index of retail sales of the same class of goods are plotted together. A period during which production and retail sales were in balance—i. e. inventories were approximately equal at the beginning and end—was chosen as the base period. Accumulation of inventory is represented in the chart by a rise in the production line to levels higher than for sales. A reverse relationship indicates liquidation of inventory. Our experience with this use of sales and production data has been surprisingly favorable considering the perverse design of the statistical source material with which we have to contend.

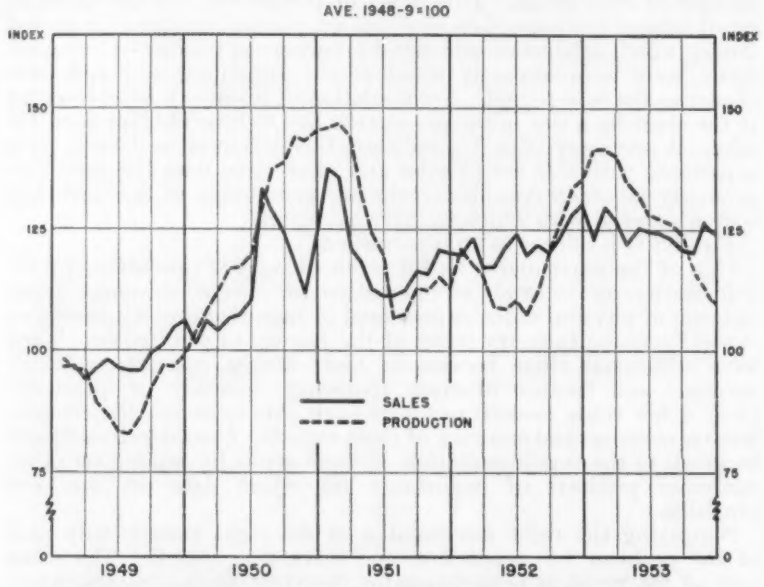
Exhibit G is offered as an illustration.

One of the particularly useful series of reports providing specific information on the extent of the market for selected consumer goods in terms of physical units, as measured by manufacturer's inventories, is the Facts for Industry series of the Bureau of the Census. They have additional value because of their almost complete industry coverage and because of their frequency—monthly or quarterly. Only a few trade associations have been able to match the comprehensive coverage and accuracy of these reports. Consideration should be given to the supplementation of these series by reports on other consumer products of importance for which data are not now available.

Supplying the right merchandise at the right time is only part of the problem for production and marketing people. The other part of the problem is to determine the right place. Stores, warehouses and other marketing facilities must be planned from the standpoint of the retail sales potential of the local community. The retail market is not distributed homogeneously over the map nor is the distribution a static one. Many communities have grown rapidly in population and income in recent years. Other communities have experienced changes in one or the other, or both, that are relatively less favorable than the average. The Census of Business is still the only source for reliable retail sales data on a comprehensive basis for local areas. This means that the latest authoritative figures for even the largest metropolitan areas bear a 1948 tag. Exhibit H is a worksheet developed by my office on which is listed the names of the cities in which Sears stores are located. Using the best available estimates of retail sales in each of these cities in total and for general merchandise, Sears relative sales performance in each is determined. Analysis on the basis of such data reveal possible locations for expansion of facilities or clues to localities in which Sears is competitively weak. The instituting of a series of reports giving comprehensive retail sales on a yearly basis for all cities with populations of 100,000 or over would go far toward closing this gap.

EXHIBIT G

NATIONAL SALES AND PRODUCTION OF GENERAL MERCHANDISE — DURABLE GOODS



SOURCE OF DATA: Computed by Dept. 733C from data issued by various Federal agencies and private trade associations.

The index of retail sales of durable goods of the general merchandise type represents monthly sales, seasonally adjusted, as a percentage of the 1948–49 monthly average. The index of the value of production of the same kind of merchandise, is also in the form of a percentage of the 1948–49 monthly average. It is calculated from a number of statistical series on physical production and shipments of various kinds of consumer durable goods, and production man-hours of labor in other consumer durable goods manufacturing industries, converted to value equivalents by use of the nearest appropriate price index series. The use of the 2-year period 1948–49 is due to the fact that average monthly production and average monthly sales for this period were in fairly close balance. Revision of this index of production in accordance with the new production index series of the Federal Reserve Board, is in process.

(A similar chart has been prepared showing production and retail sales of nondurable goods—general merchandise type.)

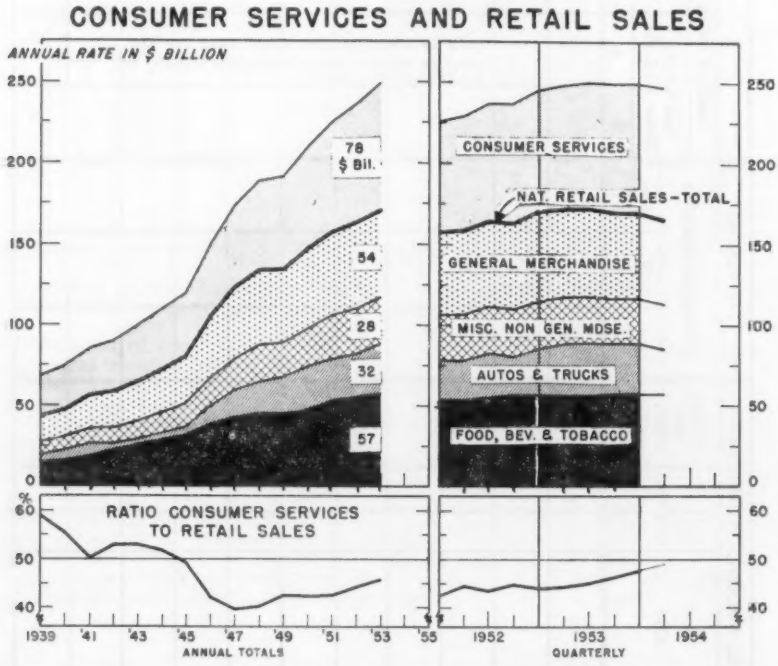
EXHIBIT H

ALL AMOUNTS IN THOUSANDS				CITY VOLUME				SEARS SALES											
					GENERAL MERCHANDISE			AMOUNT AND % TO CITY VOLUME OF GENERAL MERCHANDISE											
								Total Including Division 200 & 400		Excluding Div. 200 & 400									
										Total		Durable				Non-Durable			
CITY	TYPE	YEAR	TOTAL CITY RETAIL SALES $	Total $	Durable $	Non-Durable $		$	%	$	%	$	%			$	%		

This is a sample work sheet used for the purpose of analyzing Sears penetration of local retail markets.

In the course of my remarks, I have had occasion to refer to statistics on manufacturing production and on wholesale trade where common spheres of interest with retail trade were involved. There is yet another statistical series of especial interest to the analyst of retail trade, namely the Personal Consumption Expenditure series. In the absence of data on retail sales by type of merchandise it is common practice to resort to the use of personal consumption expenditure estimates as the nearest substitute. Often the limitation and restrictions of the data are overlooked in the process. The lack of detailed definitions item by item for this series contributes to the misuse of the data. But the greatest source of misunderstanding, in my opinion, derives from the unusual concept of the term "expenditure." Exhibit I is a chart which portrays the changing relationship between retail sales and the rising costs of consumer services. Among the various consumer services, shelter is the most important in terms

EXHIBIT I



The relation of consumer spending for services to spending for merchandise in retail stores, is the subject of this chart. Although the former has shown greater percentage increases since 1947 than has the latter, the prewar balance between the two has not yet been achieved, hence it is quite likely that service expenditures will continue to gain ground in the battle for the consumer's dollar. All rates are expressed on an annual basis using seasonally adjusted estimates of the Department of Commerce. The breakdown of retail sales into the merchandise classifications indicated has been estimated from Department of Commerce data on retail sales by type of store and on personal consumption expenditures.

of actual expenditures. We find, however, that it is not the actual cost of shelter which is being reported but a hypothetical figure which is the sum of rental costs for tenants and the theoretical space rental value of owner-occupied dwellings. More than half of the families are homeowners, a larger percentage than prewar. The ratio of this "imputed" rent for nonfarm homeowners to rentals paid by nonfarm tenants doubled between 1940 and 1952. The point I want to emphasize is that we do not really know what change there has been and is occurring in the actual costs of shelter to consumers. And if that is true of shelter, it is also true of service expenditures as a whole, of which total "imputed" rent for nonfarm homeowners constituted more than 20 percent in 1952.

In this material, I have tried to present the viewpoint of the user of retail market data. The scope of Sears retail operations, reaching as it does into most large population centers, as well as rural areas, and embracing a wide assortment of merchandise, has made us particularly aware of the need for detailed information about the consumer market. Some of the points I have raised involve fundamental revisions but their practicality and worth will, I believe, be apparent upon deliberation. The problems involved are certainly within the competence of the Government statistical experts who have demonstrated their capabilities in other fields.

Mr. Chairman, that is the statement I prepared prior to the receipt of the material from the Bureau of the Budget and Council of Economic Advisers. I have a brief supplementary statement which I believe can be put in the record. I don't think it needs to be read at this time.

Representative TALLE. Thank you, Mr. Rosenbaum. That will be included in the record.

(The supplementary data submitted by Mr. Rosenbaum is as follows:)

SUPPLEMENTARY DATA SUBMITTED BY ARTHUR ROSENBAUM

In reviewing the observations of the Bureau of the Budget and the Council of Economic Advisers, neither of which were available in sufficient time to be taken into consideration in connection with my statement, I was of course particularly interested in remarks pertinent to the areas of my principal interest. With respect to the need for data on sales and inventories by kind of commodity, the Bureau of the Budget indirectly acknowledges this need although with a different purpose in mind—improved estimates of consumer expenditures by commodity. The Council of Economic Advisers felt that it would be desirable to develop a series on "sales and inventory holdings of consumer durable goods at successive stages of the distributive process, to match the new index of production of consumer durable goods by the Federal Reserve Board." Both of these suggestions are steps in the right direction but are piecemeal approaches toward the real goal as I see it.

I also find support for my recommendations for the expansion of the monthly Facts for Industry series of the Bureau of the Census, which provides data on physical volume of production and inventories of individual commodities. The Council of Economic Advisers believes this would improve FRB production indexes, and the Bureau of the Budget, that it would also contribute toward the development of better information on productivity trends. As I have previously stated, such data delineating market potentials are per se valuable to business.

All users of economic statistics are naturally interested in improving the accuracy of the data, within reasonable limits. Any doubts held by statistical experts familiar with the details of collection and manipulation of the data, regarding the soundness of any particular series, should be resolved as an indispensable part of any program aiming for the betterment of economic data.

Similarly, it is of importance to business analysts as it is to Government economists and all other close students of business trends, to have the latest possible information available currently. The emphasis upon expediting the preparation and release of statistical reports is not replaced.

I heartily endorse the suggestions of the Council of Economic Advisers toward the matter of presentation of statistical data: avoidance of unnecessary detail; definition of statistical terms and classifications as a matter of general practice in connection with published Government statistics; seasonal adjustment of all important statistical series affected by seasonal influences; and the publishing of a greater variety of data for leading metropolitan areas and counties for which only national totals are now available; and study of ways and means for making Economic Indicators an even better medium for summarizing the state of our economic health. The work of computing seasonal factors, I should like to point out, is most efficiently handled when it is performed in the office responsible for the compilation and release of the raw data. The alternative is wasteful duplication of effort among the consumers of the statistics.

Comparability of statistical series, which has been the continuing concern of the Bureau of the Budget, seems to be receiving the full measure of attention it rightfully deserves.

Several instances of deficiencies or gaps in statistical data have been described by the Council of Economic Advisers, or the Bureau of the Budget, or both. I should like to support some of these findings in particular.

1. *Prices.*—The Council of Economic Advisers rightly criticizes the inclusion of official or quoted prices rather than actual prices, in the Consumers' Price Index. This is at odds with the common interpretation of the index. A separate index of retail prices, as advocated by the Bureau of the Budget, reflecting the entire range of commodities sold in retail establishments would be a valuable tool for economic analysis and would be useful as price deflators in the study of the physical flow of goods to consumers.

2. *Savings.*—There appears to be general agreement on the inadequacy of present data and the need for more accurate information on a regular basis. The possibility of data by economic classification of savers should be explored.

3. *Construction and related.*—The construction and construction materials industries are too important to be so poorly served in the field of statistics. Demand for products of other industries is also affected by the changing volume of residential construction, for example, home furnishings. Systematic data should be developed and published regularly on the volume of residential "fix up" expenditures; on the volume and characteristics of the housing inventory; on the volume of home completions; and on consumer expenditures for shelter, including residential mortgage debt additions and retirements.

4. *Labor force, employment and unemployment.*—The Council of Economic Advisers has made an excellent point in calling attention to the sensitivity of the overtime component of the workweek as justifying separate reporting of overtime hours of work. I, too, have recommended more frequent, i. e., monthly, reports on the number of persons working less than full time for economic reasons. It is encouraging to note that the availability of data on "fringe" benefits to workers is under study at the present time. These extensions to data on the labor force will help us follow trends in this vital area.

Representative TALLE. We will now hear the statement of Mr. Irwin Friend, professor of finance at the University of Pennslyvania, formerly with the Office of Business Economics of the Department of Commerce.

STATEMENT OF IRWIN FRIEND, PROFESSOR, UNIVERSITY OF PENNSYLVANIA

Mr. FRIEND. In view of the comprehensive and thorough statement submitted by the Bureau of the Budget on the overall system of economic statistics in the United States, I will confine my remarks for the most part to the more significant weaknesses and gaps of available information in the two areas on which I have been asked to concentrate, viz, saving and investment.

To a very considerable extent, the saving and investment decisions of consumers and business firms determine the level of economic activity for the country as a whole. Thus, the 1953–54 recession, like the 1949 downturn, has in large degree been attributable to a decline in the rate of inventory investment, the most volatile component of total business activity. So long as final demand is not particularly affected, the readjustment through which we are now passing should not be serious. Fixed investment in plant and equipment and housing, commonly regarded as the bellweather of major cyclical movement, has been well maintained, though there is some evidence of easing in plant and equipment outlays. The comparatively high rate of individuals' saving since early 1951, probably the major reason for the abatement of inflationary pressures at that time, may provide support for the economy if fixed investment weakens.

It is the interplay of these factors which will determine our economic health. If we could forecast the trends in saving and investment, we would not only be in a position to project the likely course of economic activity but would be providing Government officials and businessmen with a high proportion of the broad information they need for the formulation of appropriate economic policies.

The first step in forecasting the future is understanding the present, and it is therefore necessary to consider the types of saving and investment data required for this purpose.

In addition to discussing the deficiencies in the available information on current developments in saving and investment, some attention will also be paid in this statement to the needs for supplementary data on expectations or plans which would cast light on future trends.

Saving: Currently, the Federal Government publishes highly useful periodic data on the saving of the three principal economic sections, individuals, corporations, and, on a somewhat different basis, government. Of these, saving by individuals is the largest, probably the most important for analysis of the economic situation, and subject to the most serious of deficiencies.

There are, at present, two quarterly United States Government series on individuals' or personal saving; one showing the total of saving published by the Department of Commerce, another showing the composition of saving, that is, changes in assets and liabilities, published by the Securities and Exchange Commission. Ideally, of course, it would be nice to have such data with the smallest possible margin of error, as currently as possible, and with a maximum of detail showing individuals' saving by occupation, income, region, and other meaningful classifications and with sufficient data on the structure of saving to permit different conceptual rearrangements of estimated saving. As a practical matter, fortunately, much less is required for most general policy purposes.

The most urgently needed improvements in the SEC and Commerce series on individuals' or personal saving are: First, the elimination of the more serious sources of statistical error in estimating saving on a current basis and in reconciling the two series; and, second, the provision of breakdowns of saving for a few key economic groups not now available separately.

With respect to the first point, it is necessary to eliminate those statistical errors which could be, and have occasionally been in the past,

sufficiently large to markedly affect the interpretation of current economic developments.

Secondly, it is necessary to break down the present estimates of saving and as a minimum show separately saving by unincorporated business—farm and nonfarm entrepreneurs separately—and by various pension and other funds now grouped together with individuals, since the motives for and implications of saving by these groups may be quite different from those of savers generally. The segregation of saving by unincorporated business from saving by other individuals is particularly critical. We still do not know, for example, the extent to which the unprecedented saving of World War II represented farmers and nonfarm businessmen or consumers generally, or how each group contributed to the rise in the saving rate just before the 1949 recession or to the high rate of saving in recent years.

The most serious statistical errors in the SEC and Commerce estimates of saving, particularly the former, have revolved around the absence of current financial data for unincorporated businesses, an area in which up-to-date information is virtually nonexistent and benchmark material rather sketchy. A good part of the necessary statistical improvements in the SEC and Commerce series as presently published could be obtained by having the Internal Revenue Service tabulate regularly within 9 to 12 months after the close of each year selected income accounts and, where available, balance-sheet items for a sample of corporations, partnerships, and sole proprietorships filing income-tax returns.

Of equal importance with these compilations of existing data already being collected by the Government, would be the collection of new data through the expansion of the present quarterly FTC–SEC financial reporting program to cover nonmanufacturing corporations, especially trade concerns, and unincorporated businesses. Other statistical measures which would significantly better estimates of saving, especially the Commerce series, include more frequent basic censuses; expansion of the IRS audit control program; strengthening the construction statistics and improving other business investment data.

It has been already suggested that the inability to separate satisfactorily the saving by individuals in business from that by other individuals is probably the outstanding deficiency in the SEC and Commerce series, and is the most important breakdown of these estimates which should be attempted. There is good reason also for segregating from individuals' saving changes in the net worth of certain funds, especially private pension funds which have had a marked rate of growth in recent years, and a substantial effect on the level and composition of saving and on the capital markets. The individual beneficiary generally has no control over and only limited rights of participation in these funds. To correct these deficiencies, new data would have to be collected from unincorporated businesses and pension funds.

In addition, I would strongly recommend that a relatively new approach be attempted to provide, perhaps annually, statistically reliable estimates of the needed breakdowns of individuals' saving by major occupational and preferably also income groups—including the principal types of entrepreneurs and other quasi-individuals.

This approach is based on a sampling of accounts on the books of financial institutions, corporations, and governmental units, rather than a sampling of individuals directly, to obtain an estimated breakdown of most components of individuals' saving by economic group. Such information could be tied in with individual income-tax returns so that data on the components of saving could be classified by income group—and eventually other classifications—as well as by occupation. The strength of this approach is that it would be based on objective accounting records and minimize bias.

The sampling of individuals directly, i. e., the consumer-survey approach, while furnishing a wealth of useful information which cannot be obtained in any other manner, has not provided satisfactory estimates of aggregate saving by economic groups. However, further exploration of the potentialities of these surveys for providing such estimates would be desirable.

Moreover, it would be highly useful to supplement the aggregate data on individuals' saving described above, both for the economy as a whole and for major economic groups, with periodic—perhaps annual—consumer surveys designed to analyze the factors affecting saving decisions and with more frequent—perhaps quarterly—surveys of consumer plans and expectations likely to have a material effect on the prospective trend of saving and expenditure.

Turning briefly to the adequacy of the available information on saving by nonindividuals, i. e., by corporations and Government, reasonably reliable and current data are available on the level of saving and its composition—i. e., sources and uses of funds—for corporations as a whole. The implementation of the statistical improvements for individuals' saving discussed earlier would provide the necessary data both for improvement of corporate estimates in the areas where they are weakest—notably trade—and would make possible additional industry and size breakdowns.

No data are regulaly published on Government saving defined in a manner parallel to that followed for the private sectors of the economy. Data on net surplus or deficit—on income or product transactions—are published instead which, in effect, do not distinguish between current and capital transactions. The data, as a result, are deficient for many specific uses, and it would be desirable to have level and composition of saving data, or estimates of the sources and uses of funds, for the Government—Federal and State and local separately—as well as private sectors. However, the needs for such information are not nearly as urgent for general-policy purposes as those outlined for individuals' saving.

Investment: The needs for new and better data on investment—that is, residential and other nonbusiness construction, business plant and equipment and business inventories—are as extensive as for saving. Again it is necessary to be selective and to concentrate on the more urgent requirements. I will restrict my comments to business plant and equipment and inventory data since construction statistics are being handled elsewhere in these hearings.

Probably the most important business-investment data published by the Federal Government are the monthly Commerce series on inventories and the quarterly Commerce and SEC data on actual and anticipated plant and equipment expenditures. Both series are cen-

tral to any analysis of the business situation, with the more frequent collection of inventory data reflecting the greater volatility of this series. It may be noted that there are essentially two sets of estimates of actual plant and equipment expenditures, the first derived from Commerce shipment data (and construction statistics) and including farm as well as nonfarm business, and the second from SEC—Commerce capital expenditures reports of individual nonfarm business firms indicating both actual outlays in the past quarter and planned outlays over the next 2 or (once a year) 4 quarters. Each provides highly useful data on plant and equipment expenditures, but the second is particularly significant for general-policy purposes.

The most serious deficiency in inventory data is the absence of reliable estimates for trade concerns on a reasonably current basis. The steps outlined earlier as basic to the elimination of the major statistical errors in saving data, specifically the speedup on a sample basis of IRS tabulations and the expansion of the FTC-SEC financial reporting program, would provide information required for adequate quarterly and annual estimates. Monthly estimates of trade inventories could be obtained as a supplement to the monthly census surveys of trade sales.

Further breakdowns of published inventory data would also be of considerable use, though definitely secondary to the establishment of a reliable, current series on trade inventories. These include, first, and potentially most useful and costly, a breakdown of inventories at the different distributive levels on a major commodity rather than the present industry basis; and, second, the industrial breakdown of manufacturing inventories by stage of fabrication.

In view of the volatility of inventory investment, its importance in cyclical swings, and the lack of success in forecasting from recent movements or historical relationships the more significant changes in the rate of investment, an attempt should be made to compile systematically new sample data on the short-run inventory plans of business firms (probably for a quarter ahead). The collection of these data might make a significant contribution to forecasting changes in business conditions, even though inventory programs are likely to be more subject to change than plant and equipment where such anticipatory information has proved extremely useful. Some data along these lines have been compiled over the past year or two by several organizations, and the results look promising.

Turning next to plant and equipment expenditures, the quarterly estimates for all nonfarm business from sample reports of individual firms permit reasonably reliable estimates of overall trends in plant and equipment outlays, including a highly useful indication of the likely course of these outlays over the next 2 to 4 quarters. The major statistical deficiency here again is in the inadequacy of the available data for trade firms—a limitation which should be corrected in view of the critical importance of this series. Other deficiencies are the virtual absence of data for new concerns and certain service industries.

An attempt should be made to expand this body of data on actual and anticipated capital expenditures to cover farm as well as nonfarm business. In addition to the augmentation of the present sample of firms in the areas of significant weakness to provide better and more comprehensive quarterly estimates of expenditures, it is highly

desirable to conduct from time to time supplementary surveys to analyze the factors affecting investment decisions and to attempt to appraise the long-run investment outlook.

While the second set of estimates of actual plant and equipment expenditures referred to earlier, derived from shipments and construction data, are not as useful for most current policy purposes, they have certain advantages of inclusiveness and more readily permit a breakdown of outlays by type of capital (though not by purchasing industry). The reliability of these data for current estimates, and their utility for appraising the trend in capital outlays, would be greatly enhanced by breaking out capital goods in the Commerce monthly series on manufacturers' shipments and orders, and by segregating shipments to and orders from Government. The data would also be improved by more frequent basic censuses.

In conclusion, I should like to point out that the more significant revisions in the available saving and investment data discussed in this statement involve a very substantial improvement in our entire body of economic intelligence. This is true not only because of the importance of the saving and investment data but also because the steps required to correct deficiencies in such data would automatically fill some of the most serious gaps in key economic series generally. Thus the provision of more adequate financial data for unincorporated businesses and for trade corporations—two areas in which weaknesses have been stressed—would make for a major improvement in national income estimates.

It may be noted that I have placed some emphasis on planned or anticipated investment in outlining gaps in our data. I feel that our experience with these anticipatory data, though of comparatively recent vintage, suggests that they represent one of the more promising tools for analysis of the economic situation.

I had several comments I would like to make on some of the remarks in the investment area made by earlier speakers, but I will let that go until later.

Representative TALLE. Thank you, Mr. Friend.

We shall now hear the final panel speaker, Mr. Lester S. Kellogg, economist for Deere & Co., Moline, Ill.

STATEMENT OF LESTER S. KELLOGG, DIRECTOR OF ECONOMIC RESEARCH, DEERE & CO., MOLINE, ILL.

Mr. KELLOGG. Not reading directly from the script which bears my name, I would like to say first that I represent a kind of a new group in economics and in the statistical sphere.

I am one of a group generally known as business economists.

Most of us have taught economics and statistics and have probably worked in Government. As workers in a specialized government agency they were practically fractionalized.

I went through this same experience. I presume in the efforts of yesterday and today, especially in the efforts of your committee in setting up these hearings, there has been an opportunity for those from governmental agencies to have become whole again.

You may have heard of the story of the young mother, who when she saw her little son drawing on a blank piece of paper, said, "John, what are you drawing?"

He said, "I am drawing a picture of God."

She said, "I don't know how you can do it because no one has ever done that before and no one knows what He looks like."

His response was, "They will when I get through."

There is a wholeness about it that at least solves the problem.

As a business economist, I am expected to cover the field. I get into a great many more statistics than so far have been described today, and I find it necessary to answer questions like those you asked yesterday, which I thought did not get straight-forward answers. In addition, I have learned some real lessons in communications. I have found, for instance, that 15 one-page memoranda have a great deal more effect in developing statistical sophistication among our officers than 1 memorandum of 15 pages and that repetition of that simplicity is sometimes helpful and I find little or no irritation at that process.

I think that some of those experiences might be shared if we could set up some kind of an internship in business for Government statisticians and perhaps some of the congressional staff members; and to return the compliment by having some of our staff members occasionally experience the frustrations of being in a Government department on statistics.

You asked, for instance, at one point yesterday if there weren't some statistics that couldn't be dropped. I can make suggestions there in my own field, and let me assure you that I am heartily and deeply interested in agricultural statistics. They relate, interestingly enough, to our industry, but I can give you one kind of illustration.

In the monthly report of retail sales there is one line which regularly each month reports on changes in retail sales of farm-machinery dealers. I would like to know how that report can be made on the basis of an urban sample. The samples used in measuring changes in retail sales are largely urban. Farm machinery is, in the main, sold in very small communities, and is in the main, therefore, not adequately represented in the areas in the survey.

We are told as we read the Bureau of the Budget's report that among the statistical gaps is the need for an index of retail prices. Am I to assume that the index which is regularly reported in the Survey of Current Business, then, is not such an index, or that it is not a good one? I assume the latter may be the answer.

Senator Carlson asked yesterday about the meaning of the 88 percent which represents, I think, the latest report and figure on the parity ratio. He didn't describe it right, which I can understand. It is a difficult concept to get and not too well described in many places. It simply represents the quotient of two different indexes, both of which have been criticized by their makers as well as outsiders. They do not believe that the Index of Prices paid by Farmers or the Index of Prices Received by Farmers are nearly as good as they should be to warrant the positions as "trigger figures" which they hold in this economy.

We know nothing about the range of the errors of these indexes. To the extent that they have wide range of error, however, and that the error for the Index of Prices Paid might be substantial in one month on the upside, while the Index of Prices Received could in the same month have a substantial error on the downside (and that would not be surprising), the ratio between them could be entirely misleading, and should be looked at and used with care.

I could, as you may have observed, if you looked through the pages I submitted, go on and point out others of these kinds of problems with respect to the agricultural income series, which we find very difficult to make "gee" with the national income figure, and so forth. You have to be something of an arithmetic wizard to do that.

Yesterday afternoon, Congressman Bolling used a term which has great importance from another point of view. The term was "categorization" or classification as usually used in statistics. The Federal Trade Commission Report of 1948, based on 1947 data, revised, having to do with concentration indexes purporting to show the degree to which American business has been concentrated in the hands of a few companies. I have been interested in these figures for the farm machinery industry. In that list of concentration indexes for our industry the company which enjoys the third or fourth position in the industry was not even listed. I presume it is because the Ford Motor Co. does not make public reports or that its farm machinery production is so small compared with its other production, that they could not be separated. And from your own State, the Gleaner Harvester Corp., which enjoys one of the leading positions in the production of important harvesting machinery was not listed. A number of others were not likewise listed.

I could go on with those kind of things. I am convinced, however, after listening to 2 days of discussion that your committee has some important problems before it. I am deeply sympathetic. I think I am embarrassed for the statistical profession that it was left to your committee to make public the lists of statistical gaps which we, as statisticians, and some Government agencies, should long since have known, published, and corrected.

It is typical, I suppose, in the political climate in which such statistical work is done, to accomplish the result that sometimes we would all desire. It is especially difficult, I suppose, since the word "think" or the description of thinking is neither in a civil-service classification nor accepted as a justification for an appropriation or as a job classification, to do much thinking.

In terms of foreign trade, which Dr. Lubin mentioned this morning, I am impressed with the likelihood, in view of the recent discussions between England and West Germany, that it will not be long until we will want to know the relative subsidies of our products and those of other countries.

But we do not have to go that far to anticipate a need for evaluation and appraisal requiring thinking.

It has been for some 15 years, now, has it not, that we have had a Government price support program? Does any one of you know of a comprehensive, profound, accurate description of the impact of that program which would serve you in your very responsible positions of establishing Federal agricultural policy for this country? Do you know of a Government study or set of data which would tell you whether it is the thing to do or not, that makes it clear that something like 25 percent of the farms of the country produce about 75 percent of the value of agricultural production? What happens to the other 25 percent, composed of 75 percent of the farmers? Is ours a general relief program or is it something else? We ought to face it if we want accurately to describe, or better to solve the problems.

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Now, I think the agencies who have contributed information and memorandums for the discussions here have done a commendable job. I have been especially impressed with the report submitted by the Bureau of Mines which, much to my surprise, appears to have taken a new lease on life, and has laid down some criteria which it would do well if all the agencies could follow. It is not simply a revision, or a restatement of their desired program.

In the last portion of the short paper which I have presented, I made one proposal which it seems to me deserves consideration by the statisticians of the country, by the Office of Statistical Standards, the Council of Economic Advisers, and your committee.

Back in the 1930's, as pointed out in Mr. Belcher's paper, there was a report based on long study by a committee known as the Committee on Government Statistics and Information Services—Dr. Lubin mentioned it this morning. This committee took a detailed look at the then current state of statistics in the Government and produced a report which was used as the basis for establishing the Central Statistical Board. That was a great contribution. It studied Government statistics at the stage of puberty and provided the chance to mature. There has been a great deal of maturing since that time, but there has also been, it seems to me, some lack of direction for next steps. Whether it would have been possible to change them or not is not now our purpose to discuss, but it does seem to me that one kind of solution might be to ask a group of people representing government, the Congress, the executive, business, labor, universities, and institutions to look hard at this problem about which we have been talking and to see if they could not make recommendations which would now serve our needs for statistics in government at the stage of its maturity.

Such a project is not just for the executive, it is not just for the profession, it is also for the Congress to indicate what it needs, and perhaps for your committee, particularly, to do so. I beg your pardon if this appears presumptuous. But it was a congressional committee or the Congress itself which laid down the plans for the first statistics in this country, those dealing with the regular population count. The Congress has not lost that responsibility.

It seems to me that you do, as a committee, have the responsibility for determining what statistics are important with respect to the Employment Act, and you should be staffed independently, I should think, to give that kind of information. Irrespective of that, it strikes me that we might find great value in the establishment of a committee of the kind I have suggested.

Thank you very much.

Representative TALLE. Thank you, Mr. Kellogg.

(The prepared statement of Mr. Kellogg is as follows:)

DIGEST OF STATEMENT BY LESTER S. KELLOGG, ECONOMIST, DEERE & CO., MOLINE, ILL.

The development and use of statistics in the last quarter century has been scarcely less astounding than the gradual, though only recently recognized, development of automation in industry. Nowadays almost automatically when a particular statistical series reaches a certain point, some specific action or counteraction is started in the economy. This action by Government or private business, based on legislation, private contract or public reaction is triggered by some statistical index.

Trigger figures have become very important in recent years in wage rate escalator clauses, agricultural programs, supply contract price escalators, initiation of Government-supported work programs, in locations of employment deficiencies and so forth. It has become essential therefore that the relevant trigger series should be as completely tailored as is feasible to the specific job to be done, as accurate as it is possible to make them, as timely as requirements demand and so trustworthy as to warrant the utmost in public confidence. These are requirements of great magnitude. To mention such requirements in this context is not to be critical of our current statistical series, for most of them were developed well before they had anything like their current responsibility. To mention them here, however, is to indicate that such series are in need of continuous special attention and priority of consideration if they are to be maintained in the state of technical and budget support that is essential.

Some of the important series requiring such special consideration are the following:

1. Parity Index (index of prices paid by farmers, including interest, taxes and wage rates);
2. Index of Prices Received by Farmers;
3. Consumer Price Index;
4. Wholesale Price Index;
5. Estimates of the labor force, employment and unemployment,
6. Measures of Productivity,
7. Estimates of National Income and its farm components;
8. Cash Receipts from Farm Marketing;
9. Estimates of personal savings and private debt; and
10. Indexes of Industrial Production.

The particular problems of the technical maintenance of these current indicators vary widely. Although these problems may be known by technicians, they are frequently not recognized by most users. Without going into comprehensive detail, the following important needs of each of these series are so obvious that they should have frequent repetition until satisfied.

The Parity Index has been repeatedly patched in the recent past by its faithful producers. Patching, however, will no longer suffice for the important uses of this index. A complete overhaul is the next essential step. To be dependable the index must include more goods and services; a modern base should replace the pre-World War I, 1910-14 period; a modern set of weights based on farm-family expenditures should replace the set currently in use based on the depression late 1930's; and finally, concepts of pricing and specifications should be substantially revised if the index is to represent price changes instead of the combination of price and quality of living and production changes it now represents.

The Index of Prices Received by Farmers needs similar detailed attention.

The Consumer Price Index, although recently revised, is also in need of continuous attention if it is to represent actual prices in a rapidly changing economy.

The Wholesale Price Index, also recently revised, now requires improvement in the direction of representing actual prices. For instance, prices actually paid for steel ought to be substituted in the index for quoted prices which are used.

Methods of estimating the labor force and its employment and unemployment components, long the subject of debate over definition, have only recently revealed to the public weaknesses which should have further consideration. These series especially illustrate the need for the use of well-known technical procedures in expanding samples as variation in the desired measures increases in order to improve reliability of the results.

Measures of productivity have received a great deal of technical and popular attention but many unresolved problems remain in their names, definition and calculation. Productivity in terms of man-hours, which is the usual mode of expression, is misleading since direct man-hours currently have little relation to changes in productivity. A more accurately descriptive title would provide better communication of the term's economic significance. The data and their classification on which the measures depend, as well as calculation formulas, need substantial improvement.

Estimates of National Income and its components also demand continuous attention. For those of us who pay particular attention to the farm component it is irritating, and significant of lack of consideration, that the Department of

Commerce and the Department of Agriculture have not yet provided sufficient similarity in definition of net form income to make it possible, without considerable technical skill and arithmetic manipulation, to reconcile the estmates.

Cash Receipts from Farm Marketings is a most useful statistical series. Description of its calculation, however, indicates areas of estimation which are greatly in need of improvement and clarification. Important among these is the current pattern of monthly marketings and the procedures for taking account of receipts from the Government holding programs.

Estimates of personal savings and private debt are in need of improved statistical work as well as greater agreement on basic definitions and clarification of methods of estimating.

Indexes of Industrial Production, though recently completely revised, are based largely on man-hours of employment and are, therefore, especially vulnerable to error. The great dependence upon this index for indicating the direction of business acticity should subject it to more frequent technical review than it has previously had.

In the foregoing list and brief discussion, emphasis has been on problems in recurring regularly published indexes. For some purposes there can be no question that continuity and consistency of recurring figures must have high priority in technical consideration. For those who have had experience with these kinds of data, however, as well as for those who have attempted to use them in periods of rapid economic change, there can be no question that there is also need for statistical adaptation and flexibility in developing supplementary studies over longer periods of time to answer special questions as well as to anticipate such questions.

As illustrations of the kinds of problems I am referring to here, I shall mention two, though the number could have be extended substantially. In the field of consumer prices for instance, in the last 2 years some retail merchants have returned to the use of sales, discount practices, and the initiation of other merchandising methods which result in prices for consumer goods that differ from those on the price tags. To take acount of these kinds of changes quickly and to include them in current calculations requires technical skill and adaptability.

Another kind of illustration is shown by our lack of information as a nation on the effects of our agricultural price support programs. In all of the years in which such programs have been in operation there has still not been provided even an occasional comprehensive study by governmental agencies of such effects. A comprehensive study by area or commodity to indicate which group of farmers, by size of farms or by income has received the aid of such programs, ought to be most helpful to the Congress and the administration. In view of the importance of our agricultural programs to our economy, such studies ought to have a high priority.

The variety of needs for statistical information in an economy as large as ours is great. On the private side of the economy competition has served to meet such needs. Competition in producing statistical data even in Government might have some advantage, although it cannot be depended upon when important political issues or the vested interests of departmental administration are involved. It might be complained, in addition, that competition within Government for the development of statistics will inevitably lead to waste and confusion.

On the other hand the establishment of a huge single agency for the collection and processing of data is no guaranty against duplication or confusion. There is need at this point to consider the amalgamation of competitive statistics by whomever produced, Federal Government, State government, or private agencies. In supplying the great need for information that we seem to have developed, a more important and extensive statistics coordinating and stimulating function than has so far been recognized, may very well be one of the responsibilities to face your committee.

In the earlier development of statistical work in the United States, the Committee on Government Statistics and Information Services in the mid-1930's made a monumental contribution when it recommended, and the Congress established, the Central Statistical Board, now known as the Office of Statistical Standards. A great service to statistics has been provided in the last 17 years by the work of this agency. There are, however, many additional and necessary functions which could be performed by a similar office with a somewhat modified responsibility and staff.

Since the beginning of World War II a number of contributing groups have helped us further to mature and develop in statistical work. We now have

your committee, the Council of Economic Advisers, the Advisory Committee on Federal Reports, and numerous special advisory and review committees for the several statistical agencies in the Government and have had the Hoover Committee recommendations for the organization of statistical services.

Contribution of another type and of great value has been that of the State universities in relationships initiated and developed by the Department of Agriculture. More recently the census review committees have served a useful purpose.

The problems of statistics in our current situation are greater than those of organization. They are more nearly those of continuous review and modification involving the imagination to anticipate needs, the skill to devise ways to meet them, the understanding of our present dynamic economic system, the boldness to make the necessary innovations, and the sagacity to develop priorities and overall procedures for obtaining the necessary resources from the legislative bodies and administrative groups to make them possible.

It appears that statistics and the need for them in our business world in the United States have now matured to such an extent that it may be time to ask for another "Cogsis" type of reappraisal of our whole statistical complex. Such an appraisal will involve review of many new problems. It should therefore result in conclusions which will differ considerably from those of the earlier committee, both with respect to the breadth of responsibilities for statistics in Government and the organization of work. It is proposed, therefore, that you give consideration to making a request jointly with the administration of some appropriate interested private agency or foundation in the United States to establish an ad hoc appraisal committee comprised of Government, academic, institutional, business, and labor representatives. This committee should be asked to appraise our whole statistical program, its needs, methods of maintaining its integrity and developing its flexibility and procedures for improving communications about it and to report to you upon its recommendations within a reasonable period of time.

In making its study it would be obvious that such a committee would require great patience and understanding of the characteristics of our democratic form of Government. It would have to be recognized that in this area of consideration it is dealing with a most unique situation. It is dealing essentially with a monopoly of the production and dissemination of statistics on the largest scale in history. No copy of any existing system or organization or procedure is likely alone to solve it.

Representative TALLE. The Chair believes that the procedure employed during the morning session worked very well, and we want to do the same thing now. But Congressman Bolling and I are a little fearful that there may be a bell ringing in the House of Representatives for a vote rather soon and, if so, we will have to respond, of course, but we do want this meeting to continue as long as you would like to have it, and we will remain here until we hear the bell.

I think perhaps, Congressman Bolling, you might like to ask some questions at this time.

Representative BOLLING. What I would like to do is this. When the members of the panel and the others comment, I would like to hear a good deal more said about something that was mentioned by Dr. Gainsbrugh, and has been mentioned once or twice by others and that is this question of seasonal adjustment.

I would like somebody to start. Maybe I can get somebody to start by telling me what seasonal adjustment is, how it is done, and why.

Do I get a volunteer?

Mr. MILLER. I will take it.

Representative TALLE. Mr. Miller, of the morning panel, volunteers.

Mr. MILLER. Let us use egg prices as an illustration, since I have worked with them particularly, and because I think everyone recognizes that egg prices are higher in the fall than they are at this time of year. How much higher is the thing we are concerned about here

in terms of measurement, if you look at the thing over a long period of time.

Suppose also that in trying to analyze what is going on in the egg market, we take a monthly series of prices for the Chicago market on a particular grade of eggs, and we have that series for the past 20 years. It will have a lot of wiggles in it, because it always goes up in the fall and always goes down in the summer.

Of course, it is also influenced by whether incomes are good or whether they are low. The price of eggs went down in early 1930 with the recession at that time, a long drawn out recession. They went up very sharply after the close of World War II, as incomes and prices generally rose.

If we want to find out what kind of movement egg prices are actually making, and so that we can look at the trend, we have to take out this typical seasonal fluctuation. So we go through a mathematical manipulation of the actual egg price data which will give us an index of seasonal variation.

When we get all through with it, we will say, "Well, egg prices in July are 80 percent; egg prices in November are 120 percent." That means, percents of the overall monthly average. And we have 12 indexes, 1 for each month expressed in percentage terms. That is the seasonal index. Now all I have to do is to divide all actual monthly prices by these percentages for each of the months, and when I finish, I have a seasonally adjusted series of egg prices which tells me the trend in egg prices.

In other words, I have smoothed the egg prices so that I can see whether they are actually moving up or down in relation to other things. I have a separate measurement of their own inherent fluctuation due to *seasonal* and of the movements that are brought about by *unusual* changes in supply or by changes in demand or any other factors which might affect egg prices.

Representative BOLLING. Now, I would like to pursue this for just a little bit. Are eggs one of the commodities that are in the index that has to do with consumer prices? How many items are in the consumer prices?

Mr. CLAGUE. Food prices, 90.

Representative BOLLING. Ninety. I assume you have to apply the same sort of technique to each one of the 90?

Mr. CLAGUE. Yes. We could try to make a seasonal for each of the 90, except that some of them might not have any significant changes during the year and would not be seasonal. You do not apply seasonal adjustments except when you have an obvious seasonal pattern of some kind. Some of them might not have that kind of pattern. So, we do not do this to all of the 90 items.

Representative BOLLING. How do you get seasonal adjustments?

Mr. CLAGUE. I think first of all—may I answer that question, Mr. Bolling, by taking it in two steps?

Representative BOLLING. Surely.

Mr. CLAGUE. I would like first to mention a seasonal that you and the Congress gave to us a couple of years ago. You were worried about housing credits. I will shift for a moment and come back to the foods later. You were concerned about the credits for home building and whether or not these should be controlled. So you passed a

law which provided that we should make a tabulation every month, and whenever the number of new houses started each month ran at a rate beyond 1,200,000 for the year, such-and-such controls should be maintained. If it ran above that level for a period of 3 months, controls should be kept on, and if it went below, controls should be taken off.

Representative BOLLING. Mr. Clague, if I may interrupt you, that confused me, too.

Mr. CLAGUE. Mr. Bolling, we did the best we could with it, and on page 18 of Economic Indicators for July, which you have before you, you will see a chart of the last several years of housing starts, uncorrected, and then in the table at the right-hand side, you see each monthly figure converted by a seasonal adjustment to show whether or not it was running above a 1,200,000 annual rate. This is doing the same thing that Mr. Miller mentioned, working with housing starts instead of eggs.

Now, I would say one word, carrying it a little further than Mr. Miller did, as to how we do this. We looked back over the years, back 15 years or so, and found this general pattern: say, 50,000 or 60,000 starts in January and February, 110,000 or 120,000 starts for May and June. We actually eliminated a year or two from the calculation (1943, I think) on the ground that it did not fit the pattern. We tried to pick out what was the normal seasonal behavior. There is a certain judgment factor here. We did not do it mechanically, going back 15 years and taking each of these months and averaging them. There is a judgment factor, and that is why different seasonal adjustments that are made by different people on the same series can sometimes turn out to be different.

Now, to come back to your seasonality question on the eggs and other food products, we have not carried out seasonal adjustments on all of these. It is not necessary in connection with the publication of the Consumers' Price Index. For interpretation we occasionally make a statement in one of our releases that egg prices rose more than seasonally or fell more than seasonally. But for this purpose a very rough adjustment of the data is all that is necessary.

We don't have to calculate price seasonals very carefully as we did in the case of the housing starts, where we had to work out the best possible adjustment, because Government policy on credit was turning upon it.

And incidentally, I would like to say one last word on that point. It was mentioned in the testimony here earlier that last year the Congress gave us some money to revise the series on housing starts. That revision was absolutely essential, because the way we were conducting that series at that time we were sometimes on very shaky ground on that 1,200,000 annual average. There were times when I was very much worried that our preliminary figure would fall below that average and the later (revised) figure would rise above it; in which case there would have been great confusion in Government policy.

In other words, adjustments of this kind, if you make seasonal adjustments, must always be as accurate as the uses that are to be made of them.

Representative BOLLING. Now, does this sort of tie in with what Mr. Kellogg was saying a little earlier about parity, that it might not be too

good an idea, or maybe we are not in a position yet to be so precise in our trigger mechanisms, that maybe when you get around to tying a housing law into a set of judgments that necessarily cannot be absolutely precise, maybe you are being a little bit too optimistic about what statistics can do?

Mr. CLAGUE. I will not talk about parity, but I would say this, that you do have to bear in mind that the accuracy of statistics has to be related to their uses. And one of the reasons the Consumers' Price Index is among the more accurate statistical series in our Bureau is that for many years public attention has been centered upon it, and public use has demanded it, so the Congress has supported the funds to put that in good shape. Not all the statistics of the Bureau of Labor Statistics are anywhere near as accurate as the Consumers' Price Index for that reason.

You buy accuracy by putting more effort in effective collection, in tabulation analysis and interpretation of the statistics.

Representative BOLLING. Can you buy seasonal adjustment accuracy?

Mr. CLAGUE. Yes——

Representative BOLLING. I have a strong suspicion that if I went around, I would find some differences of opinion as to the exact technique that should be used and I suspect there would be slight differences in judgment on the part of virtually everybody involved, would there not?

Mr. CLAGUE. I think I should ask some of the other people to talk to this. I have talked too much on it.

Representative TALLE. Dr. Burgess.

Mr. BURGESS. Could I talk about the matter as applied? Somebody suggested here something about the seasonal adjustment of the unemployment series. We had an instance in the June figures. This illustrates the need for judgment that you speak about. It has been expected, and would be in accord with the past experience, that the June unemployment figure would increase because of young high school and college students entering the labor market, and not being placed promptly. And in fact I think the figures indicated that on the average in the past, there is something like a 20-percent increase in unemployment in June as compared with May. But we had practically no increase this time.

Now, in the comment in the release, we did not apply a seasonal factor and say that the seasonally adjusted unemployment would have been so much on the basis of the past. But we did say that there was practically no increase, contrary to the usual seasonal pattern. That is the point that you are making, that it is applied in that case not with rigidity, in getting a factor and applying it to the current series exactly, but recognizing that there is a seasonal change that usually is so much, but this time is different from that.

Now, if you want to correct a whole series running back 5 years and make economic surveys, you have to apply to each figure a single factor to get a seasonally adjusted series running back over a period, but for the current purpose, for the figure that has just happened, it is better to make a more detailed analysis.

I am answering your question and also some points that were made in the discussion.

Representative BOLLING. Of course, the reason that I asked the question is the obvious one. It is connected with a matter that I raised yesterday, that the public has an entirely different view of what a seasonally adjusted figure is than all of us have. The public has a feeling that it is a great deal more accurate and precise than it is.

Mr. BURGESS. Your point is well taken.

Representative BOLLING. I think that is something that is very important for all of us to clarify.

That is all.

Representative TALLE. Mr. Rosenbaum?

Mr. ROSENBAUM. Mr. Chairman, if I might just go to another subject——

Representative TALLE. That is quite all right.

Mr. ROSENBAUM. You mentioned that you and Representative Bolling might be called away. A lot of reference has been made in the past 2 days——

Representative TALLE. We would, of course, hasten right back after responding to the rollcall.

Mr. ROSENBAUM. Many references have been made in the past 2 days to the failure of Congress to appropriate funds as being 1 of the reasons why we do not have many of the statistics that are needed. However, I wonder if a somewhat different viewpoint, that may not at all tie in with current budgetary practice, may not be in order. Business, and my own concern among others, has been busy cutting out some of the frills because of the situation that has been brought about through somewhat lower profit margins.

Representative TALLE. I am interested in your suggestion.

Mr. ROSENBAUM. We are doing it, too, I might say, through possibly working harder with somewhat reduced staffs. We are not being called upon to produce anything less in the way of service to our companies than we were before. As a matter of fact, we are actually giving them more.

It seems possible that there is room for a little more flexibility in the operation of governmental bureaus, namely, the census of retailers, for example, which is very dear to my heart, could be incorporated as a standard requirement by whatever means is necessary and not be dependent on the need for a specific appropriation at a specific time in order to make it possible.

Maybe all of the things that should come out of the census should be part of the grist that you would expect from the census, with a budget geared to a sufficient flexibility to take care of the known peaks and valleys that some of these things would produce, but not leave them in a situation where the failure to make a specific appropriation means that you get nothing.

Business is not operated on the basis of all or nothing. We are just operating more intensively with somewhat less funds than we had before, but we are operating. We are not cutting everything out.

Representative TALLE. The joint subcommittee is keenly interested in having pointed out to us things that are now being done which may be of little or no value, and in this way we may find available money for doing some things not now done or done only partially.

Mr. ROSENBAUM. Mr. Chairman, much of the decision as to how to accomplish that may lie right within the proper working bureau itself,

with the knowledge of how its manpower is being utilized and distributed, which someone on the outside possibly could not do nearly as well.

Representative TALLE. I am very much indebted to you for saying that, because I believe it is a statement that has more value in it when it comes from private business than if it came, say, from me as a politician.

Mr. BURGESS. Could I make a comment on that?

Mr. MCCRACKEN. Mr. Chairman——

Representative TALLE. We will be glad to hear you, Mr. Burgess. Professor McCracken.

Mr. MCCRACKEN. I do not want to inject a discordant note in this exchange here. I am sure all of us would be thoroughly in accord with dropping out any deadwood or excess baggage in our inventories of statistical information. I do not get the impression that the Government agencies, and I speak purely as an observer on this matter, are entirely unaware of this. But the major point which I would make is this, that I think as our economy becomes larger and more complex, and as the policy problems therefore become much more complex, we have to recognize that we cannot assume that if a new piece of information is necessary, there must be an old piece of information which can be dropped. In other words, the total quantity of needed information is going to expand.

Mr. BURGESS. Mr. Chairman—

Representative TALLE. My reference was to such matters as might be archaic. We find that, of course, in lawmaking, when we revise codes of law. The ordinances of the city of San Francisco were revised some years ago, and one law that was dropped declared it illegal for a conductor on a streetcar to stand on the rear platform and shoot at jackrabbits. I am sure there is nothing so archaic as that in our statistics.

Mr. MCCRACKEN. I would like to make one further suggestion. One way, of course, might be to conduct a laboratory experiment by dropping some statistical time series out of the publications and seeing how many people squawk about it.

Representative TALLE. I think that is a good point.

Mr. KELLOGG. Mr. Chairman—

Representative TALLE. I think Dr. Burgess first asked for the floor.

Mr. BURGESS. I think Mr Rosenbaum has not looked into the arithmetic involved in getting money enough for the business census, and cutting out regular funds. The regular funds are $6,200,000 for the fiscal year 1955. Business censuses cost $9 million for fiscal 1955. If you can get $9 million out of $6,200,000 and still carry out some of that, you go ahead and do it.

Mr. ROSENBAUM. Dr. Burgess, I was not referring to the specific budget under which you are operating at the moment, but, rather, a very different method of correlating all the budgets of the census might be the solution that would give the flexibility to cover the most important things in any given time, so that you do not necessarily have $6 million earmarked for one purpose and $9 million earmarked for another purpose, and failure to get the $9 million means you can do nothing.

Maybe you might have a total budget of a given amount, which we hope would be adequate, and with that total amount, you would furnish all of the things that the business community might expect you to furnish us.

Representative TALLE. Dr. Rice seems to want to get into this.

Mr. RICE. Mr. Chairman, I want to call your attention to the fact in yesterday morning's hearings Senator Carlson asked the question of Mr. Belcher, Assistant Director of the Bureau of the Budget:

> Are there any of these statistical programs that in your opinion are unnecessary and could be eliminated?

Mr. Belcher in response pointed to the succession of examinations which are made of any particular budget item, being examined in the agency, the department, the Budget Bureau and submitted by the President to the Congress, where the appropriation committees again go over it, and he concluded:

> My conclusion on these things would be that there is nothing of any great magnitude that could be eliminated, that what is in there is there in response to a registered need. Now, when you get down to details, a good number have been dropped in the past, and I think they can be in the future. I think that is a gradual process.

I want to call attention to your existing record on this particular, matter, Mr. Chairman.

Representative TALLE. Thank you for the pertinent point you have made, Dr. Rice.

The impression of the Chair, from the total testimony, with reference to statistics, is that you want "more," "better," and "faster" statistics.

Representative BOLLING. That is right, and for less money, too.

Representative TALLE. I think it is appropriate now to offer an opportunity for final comment. I started at the left this morning. I will start at the right now.

Mr. Paradiso, have you a comment to make?

Mr. PARADISO. I do not have any particular comment. Here again I think I go along with a good deal of what has been said this afternoon. Perhaps one of the things I would like to point to is that because of the fact that we do not have some up-to-date information, particularly in this field of consumption, we get many inquiries with respect to the interpretation of retail sales in relation to personal consumption expenditures. Lots of people confuse the estimate of sales of retail food stores with expenditures by consumers for food. One of the reasons for that is that there is a very complicated procedure which you have to go through to go from the sales of food stores, which may include not only the sales of food but also of other items, to consumers' purchases of food; consumers purchase not only from retail stores, but from wholesalers—from farmers directly, and from manufacturers.

So there is this kind of confusion on which we get all kinds of questions simply because we do not have up-to-date information for us to be able to make this translation.

This is an example of the kind of handicap which I think some of the agencies are under in trying to explain these various types of series to the public.

Representative TALLE. Thank you very much.

Dr. Riefler?

Mr. RIEFLER. I have nothing further to say.

Representative TALLE. Mr. Clague, have you something?

Mr. CLAGUE. Yes. I would like to add just 2 or 3 points.

Like Mr. Burgess, I have had lots of experience as the Commissioner of Labor Statistics in practicing this elimination from time to time of items that we think are less necessary than others. Of course, I have two advisory committees consisting of business and labor groups, and we hear from them in no uncertain terms. One of the things we learn from this experience is that the attempted elimination brings to light new uses of which we did not know when we were running the series routinely.

I remember several years ago we tried in a severe budget cut to eliminate our union wage scales surveys, which were costing us around $60,000 or $70,000 a year. Our thought ran something like this: "Well, this is something that the unions must have for themselves, anyhow, and it is not necessary for the Government to get it." There was a tremendous demand for those figures, coupled with an insistence that they should be ranked very high in our priorities. But we did make productivity improvements in the collection, using mail questionnaires from the local unions, whereas we had formerly done the work by means of agents making visits to the union offices.

But the fact is that we have preserved that series right down to date. I might cite other examples, but I shall not take the time to do so.

We in the Bureau have set up customer surveys by which we try to find out from time to time what uses are being made of various kinds of data. We have found these surveys exceedingly useful as a guide to decisions to which series of data should have higher priority and what kind of people use our information.

A second point I would like to emphasize is this. Two years ago, or three years ago now, you will remember that a subcommittee of the House Education and Labor Committee reviewed the Consumers' Price Index in great detail, held a series of meetings over a period of several weeks, and published a report which was submitted to the full committee—and was accepted by them. It has been published as a House bulletin with which many of you are familiar.

Now, one basic recommendation that the House Education and Labor Committee made with respect to the Consumers' Price Index involves the same point that was mentioned here by Mr. Rosenbaum a minute ago. They stressed the importance of continuity of appropriations and steadiness of appropriations in order that we might keep up the same quality and accuracy of data from year to year, not to have upward surges in appropriations one year and down in another.

Speaking as an administrator, I can say that that is a very inefficient way to conduct statistics. It is difficult in the administration of personnel. There is a loss in efficiency which is absolutely inevitable.

So one of the things that we statistical agencies need is reasonable continuity of appropriations and assurance that we will have somewhat the same amount of funds from year to year.

A third item I would like to mention very briefly. Several people have spoken about weaknesses in our series, but this does come back to the question of more funds. It has been stressed that in our Consumer Price Index and in our Wholesale Price Index we ought to get

reports occasionally from both sides of the market—from both buyers and sellers. I just want to emphasize that this takes more funds, and from time to time our Bureau has asked for more funds for this purpose.

For example, in wartime it was found out that rents collected from the rental agencies were not an adequate picture of the rents paid by the consumer, the tenant, so we shifted our collection from the rental agencies, which constituted a cheap method of collection by mail or by an occasional visit—we shifted around to a visit to the tenant himself, collecting the rent figures directly from the payers.

Mr. Kellogg and several other people here today mentioned that at the present time in our wholesale prices, we are collecting only from the seller of the product, the manufacturer. It might be desirable to collect some information from the buyers of that product.

I made a budget request several years ago on that subject so that we might have a test sample of, let us say, the consumers of steel, and find out what prices were actually paid by them. There might be other items in the Consumer Price Index, particularly appliance prices, new car prices, used car prices, and things of that sort for which we could undoubtedly obtain more accuracy in pricing if we had the means to go out and visit consumers and get corroborating information on the prices paid.

But that is one of those elements of accuracy for which you have to pay. In other words, in statistics you have to have a reasonable balance between the needs for the data, the accuracy that is required to meet those needs, and then the amount of money that is available to carry out the program.

Thank you.

Representative TALLE. I should like to ask Mr. Wells if there are serious lags in agriculture. Are there gaps and lags in agricultural information?

Mr. WELLS. The answer is yes, to some extent, but probably not as much as in the general business field that most of the discussion has centered around in the last 2 days, Congressman Talle.

Representative TALLE. Is crop reporting pretty well up to date?

Mr. WELLS. I think the question in agriculture centers much more on how to make our materials more accurate than it does on how to cover fields we are not now operating in—with the one major exception of farmers' production and living expenditures for which we need recent information.

Representative TALLE. And you are struggling with your revision of the parity formula, too, perhaps?

Mr. WELLS. There are a number of things having to do with the calculation of our indexes, where we wish we had a better statistical background—here again recent farm expenditure patterns would be very useful. Now, whether or how much we might revise or change, I am not in a position to say. We might come out with exactly the same answer that we have now but it would allow us to more adequately answer the type of questions which Mr. Kellogg has asked.

Representative TALLE. I would like to get you and Mr. Kellogg together sometime for leisurely discussion about that matter.

Dr. Stuart Rice?

Mr. RICE. Mr. Chairman, there are three points about which I would like to speak briefly, among the many that I would enjoy discussing. They are rather general in character.

Mr. Colean said a little earlier that Government on its part must take precautions to insure objectivity and veracity and to avoid the shading of facts to justify political action or to give a good face to an administrative operation.

I wanted to testify, Mr. Chairman, to the integrity of Federal Government statistics and statisticians. My intimate acquaintance with Government statistical activities began in Mr. Hoover's administration as President, and has been carried on as a Government employee for 21 years this month. And while I have seen sometimes evidences of bias by administrators in the selection of subjects for investigation and in 1 or 2 cases there have been problems arising as to the desirability of publishing certain information because of the confusion that might result from the publication—the information was published in such cases, I may say—I have never yet known of a case where data collected in a governmental statistical inquiry were manipulated in such a way as Mr. Colean says we should guard against. I have never known a more able and intellectually honest group of men and women than the Government statisticians, among whom I have worked.

That is my testimony on that point. And that carries over, I might say, to the desire on the part of all statisticians of whom I know, and a constant policy of my own office, to avoid any sort of political implications from the collection or presentation of Government data.

My second point is related to Mr. Bolling's question a moment ago on the accuracy of the data we use. There is no such thing in our universe, our world, as exactitude. Even the physicists, whose work we like to think of as exact, now proceed on the basis of the so-called principle of indeterminacy under which there is no such thing as exactitude in the physical world. And, of course, if lacking there, it is much more so the world of economic and social affairs.

Consequently, every measure which statisticians obtain of the economic and social world about them does carry along with it some margin of uncertainty, some margin of inexactitude. The point that I wish to make here is the obligation which we recognize and which statisticians increasingly recognize of indicating to the public, to the readers and users of the data, the extent of the inexactitude that is attached to the figures.

Now, the public is not accustomed to the idea of a margin of uncertainty attached to figures. They assume if a figure is in a Government table, just as I used to assume in my childhood, that if it were in print, it must be so; it must be exactly so. And, of course, it never is so. And one of our problems as statisticians is to get across to the literate public which uses Government figures the fact that every figure represents actually a range of possibilities rather than an exact precision.

That margin of uncertainty is, of course recognized particularly in the case of sampling, and much of the recent objections or protests against Government figures based on sampling has been due to the honest facing of fact by the agencies concerned. They have

admitted to this uncertainty, and therefore, the public has thought they couldn't be very good; the figures couldn't be very good if there was some uncertainty attached to them.

It is part of our obligation, then, in every statistical report, so far as possible, to indicate the degree of exactitude that can be attached to the figures, the limitations that should be taken into account by the users of those figures. One of the lamentable things about the pressures that have been referred to so often here in the case of the resources available is the temptation, whenever those pressures impinge upon an agency, to slack at the point where the discussion of the accuracy of the figures should appear. It is so much easier to publish the figures and slough off the discussions of their inexactitudes and limitations.

Much more could be said on that, sir. I want, however, to go on to my third point.

I am grateful for a number of favorable comments that have been made today and yesterday about the work of the Office of Statistical Standards. There appears to be a general impression that it has done a fairly good job, and I am glad of that.

The kind of job that we are called upon to do is relevant to this discussion today, and not very much has been said about it. Figures in and of themselves can be very useful for particular purposes. But the use of Government figures is more often than not in the combination of figures from different sources, rather than a single series. Perhaps a simple, oversimple illustration would be in the combined use of figures on industrial production and employment, which are collected and generally criticized separately, for purposes of calculating productivity and similar sorts of information. It is in the combination, putting together, of the use of figures from different sources that the real testing of those figures often comes.

Now, it is the combined use of Government statistics, then, which makes of our Federal statistics, or should make of them, a statistical system, rather than a mere aggregation of separate and unrelated figures. The problem of coordination, which is the particular responsibility of the Office of Statistical Standards, is to assure that figures derived through different activities of different departments and agencies will fit together in order to make of the whole a system which would otherwise not exist.

Now, for example, some of the ways that a national statistical system is in process of being brought about—without which a system would not exist—is by the standardization of classifications and definitions. By interagency efforts, which we have had the privilege of leading, standard classifications have been developed and put to use simultaneously by different agencies. They include classifications of industry, of commodities, and so forth. Prior to the development of statistical coordination activities, agencies each separately from the others developed their own classifications in such fields.

Standard definitions have been adopted: For example, much attention has been given in the last few years to the definition of metropolitan areas for statistical purposes. At one time, many agencies made different aggregations of areas around cities for purposes of getting information about the metropolitan area as distinct from the area within the political boundary. Similarly, we encounter the

question, What is a production worker? in figures on employment. We have sought to standardize the definition of "production workers" and other types of employees. When I say "we," I am talking of Federal statisticians generally.

Standard reporting periods for employment are another instance of standardization. Standards of quality in report forms and survey designs are the particular responsibility of my office when we review the proposed collections of information from the public submitted to us for review under the Federal Reports Act of 1942.

Standards for publication of statistics were worked out some years ago as an interagency enterprise in which all of the leading statistical agencies of the Federal Government participated.

When you are collecting statistics, your universe must be defined. Let us suppose, for instance, that you are getting wages of workers in aircraft plants, the body frame manufacturers, and you took a few plants on the east coast and forgot that there were airplane manufacturers in the Middle West and on the West Coast. Your universe, if not defined, would be completely misleading. And the figures you would get would be misleading because you had not carefully defined your universe.

And your reporting units, if you are going to compare different sets of data, must, of course, be so defined that the results are comparable.

For example, suppose you are comparing two sets of data concerning metallic ores which have different metallic contents. They would not be comparable.

Now, all of that, sir, I wanted to indicate as illustrations of the type of thing which we have in mind when we discuss the need for statistical coordination. These various statistical activities that you have been hearing about today, largely each in isolation from the other, have grown up separately as the responsibilities of different departments and agencies and bureaus. And to have a statistical system which will give you maximum usefulness from all of these data as they are collected, they must be fitted together. That fitting process, which takes many different forms and must be applied at many different points, is the job of coordination. That is the responsibility of the Office of Statistical Standards.

I am sorry to be so long, Mr. Chairman.

Representative TALLE. Thank you, Dr. Rice.

I am certain that everyone here would like to have a parting word from Dr. Hazel Kyrk.

Miss KYRK. I do not believe, Mr. Chairman, that I have anything in particular to say. I think this afternoon's discussion has been particularly stimulating, I think in part because some people departed from their prepared statements and spoke, perhaps, more spontaneously and freely than they otherwise would.

Representative TALLE. Is there anything further?

Mr. Wells?

Mr. WELLS. Yes, Mr. Talle. I have some observations I want to make based on today's discussion.

In the first place, I think that there has been too much discussion about appropriations or the lack of appropriations. I have a strong feeling that if the statisticians and those who use their services inside

and outside the Government can agree or decide upon a coherent and consistent scheme of governmental statistical services, that the Congress would be quite favorable. And I think one of our difficulties has been that we have not altogether agreed upon such a coherent and consistent scheme or how to go about determining one. That is one reason why I have welcomed these particular hearings.

In the second place, I think we have, perhaps, emphasized too much during the day's discussion what has been termed "benchmark data," chiefly, censuses. Such benchmarks are only means toward another end, not monuments to set up and polish and look at by themselves. I am interested in censuses, and I am interested in good benchmark data as a means of getting accurate current data. They provide accurate pictures or cross sections which we do need every so often. But in every case, I want to know how soon these benchmark data are going to become available, and how they are tied in with current reporting services of one kind or another.

Now, the third remark has, I think, more to do, Mr. Kellogg, with your remarks about thinking processes than anything else. That is to say, I do not conceive of statistics as being the kind of science which actually or absolutely answers some of the great social problems of my particular generation. It seems to me the function of governmental statistics, and those of us who are acting as statisticians, is to bring together materials which will eliminate some questions, which will in some cases, give flat answers; but in most cases statistical materials will only allow the great body of people who may be interested in particular problems, whether they be accountants or statisticians or business executives or newspaper reporters or Congressmen, better to do their own thinking and arrive at some kind of workable conclusions which I am sure that statisticians and statistics alone will never supply.

Representative TALLE. Mr. Colean?

Mr. COLEAN. I would just like to clarify, if I may, my remarks in regard to the objectivity of governmental statistics, with particular reference to what Dr. Rice has just said.

In my testimony, I think I made clear that I had complete confidence in the agencies now charged with the collection of construction statistics, mainly, the Bureau of Labor Statistics and the Bureau of the Census. And I am also sure that as long as appropriations for these purposes are made directly to those agencies, we shall continue to have a very high quality of work and a high quality of performance.

I do think, however, that there is a danger that can give us some cause for concern when appropriations for statistical purposes are made to an administrative agency which in turn allocates funds to the basic collecting agency, and which again considers that it has some proprietary right in the results to publish or not publish, or publish part and not publish part, at it chooses.

There have been some cases in the past which I think point to that danger, and that is what I was referring to in my remarks. As long as the appropriation for this work is made directly to these basic collecting agencies, I am sure that we will have a very high quality of performance and can have complete confidence in the results.

Representative TALLE. Thank you, Mr. Colean.

Mr. Friend?

Mr. FRIEND. I think most of the people at this end of the table, as well as technicians elsewhere, have a pretty high opinion of the Government statistical program generally, and also a feeling that there are a number of areas where there are some pretty serious needs for additional information. But I think perhaps what has been lacking here today has been an attempt to assign degrees of priority to needs.

It is perfectly obvious that we are not going to get all these needs taken care of at once, even though I for one feel that a high proportion of them are worth the expenditure involved. I think it is very important to assign some type of priority to these needs. I do not plan to attempt that in any comprehensive fashion here.

But I do want to illustrate the problem by commenting briefly on a couple of things that appeared in the Council of Economic Advisers' statement. For example, the Council's first recommendation, or listing of needs, was expediting the personal income data by a week or 10 days. Some people today have questioned generally placing too much emphasis on timeliness of data. Following up this point specifically, I do not know by what criteria one would expedite the personal income data. The series is one of the steadiest or least sensitive in the Government. It does not have much cyclical variability or lead, and I do not see how you would gain much from expediting it by a few days.

As another illustration, consider the Council's suggestion for getting data on new orders on a weekly basis. From having worked with the monthly series on new orders, I think we have a lot of work to do before we can hope to utilize weekly data on new orders. There are such large, erratic fluctuations that it is difficult enough to detect cyclical changes from the monthly movements in the data. So while eventually it would be nice to get to the new orders data on a weekly basis, I feel it should have a relatively low order priority.

Just to mention very briefly some of the other statistical activities which were suggested by the Council. I agree that compiling quarterly instead of semiannual data on business births and discontinuances, improving the fragmentary information on facilities completed and made available for use, and making regular surveys of economic characteristics of borrowers, are all important. I just have the feeling that they are not nearly so important as some of the other needs confronting us.

I think it is essential to get these priorities set up. I have just one last remark I want to make, in an area which I consider of particular importance.

Mr. Gainsbrugh made the point this morning that we ought to be careful about how far and how fast we go in the area of anticipatory data. I am inclined to agree with his stress on the necessity of continually analyzing and testing these data but not with his apparent willingness to live with the serious statistical deficiencies of our present series. I gather he is saying, in effect, that there is danger of complacency in taking these figures at their face value and using them as a substitute for thinking or for a rounded program of business research.

It seems to me it is much more dangerous working with unreliable data in a highly critical area, and in any case, I am dubious about

avoiding complacency by maintaining the gaps and deficiencies in these data as they exist now.

I gather my time is about up.

Representative TALLE. I might say, Mr. Friend, the next task of this subcommittee will be to select the phases on which we believe we should do intensive work. These hearings, of course, will be printed and made available for distribution, and then the committee will proceed to select as well as it can the area or areas it believes should receive intensive study.

I would like about 30 seconds for myself before the gavel falls, but in the meantime, I do not want to cut anybody off who may have something on his mind.

Dr. Burgess?

Mr. BURGESS. I just wanted to get in a little amendment to Mr. Clague's comment, that he wanted reasonable continuity of appropriations. The Census Bureau would want reasonable discontinuity of the appropriations. You have to get in the periodic censuses. If people were willing to have the census of population spread out over a 10-year period and have different parts of the country coming in and different years, we would get continuity. But comparisons between cities and so forth, would not permit that, I am sure; and the same way on a business census or manufactures census. You need to get the whole country as of the same date. So we have to argue for a reasonable discontinuity in appropriations, and have that accepted.

Another point—I perhaps pick on Miss Kyrk. She wanted to know who supports whom on the income reports. This brings up the point that there is difficulty or impossibility of getting data that are themselves unknown to the respondents or unknowable, and require more analysis than they can make. And I understand in going into a family and finding what the proportion of the grown-up children's expenses paid by the parents are, or vice versa, you just cannot get any uniform answer to it. I have three grown-up daughters, and I think you would recognize that in the abstract.

Miss KYRK. I did not mean that you would find that out. I meant if you had furnished me with certain other factual data, I could decide that.

Mr. BURGESS. Oh, you could do it. That is fine.

The census enumeration procedure is getting facts that are known on the records of business concerns or on the household or farm, and it is not our job to solve these logical difficulties, or accounting difficulties that may arise.

Representative TALLE. Do you have a comment, Mr. Likert? I thought you raised your hand.

Mr. LIKERT. Yes, one very brief statement, if I may. In connection with what my friend, Mr. Gainsbrugh, said, I think it is very important that we not stop collecting data because in connection with some of the information that Mr. Gainsbrugh was asking this morning, you can only get it by collecting more data, reinterviewing people whose intentions have been expressed and finding out whether they did or did not carry through their original economic intentions, and if they deviated, why they deviated, which would be very important. We are doing some of that research now, and it yields some very

important insight. It seems to me that as this kind of reesarch is done which can point to important variables that need to be measured, I for one would make the prediction that we as a nation are going to spend much more money on statistics.

Necessarily, as we become more complex, more functionalized, and more productive to functionalization, we become more interdependent and need better data for the full balanced operation of business, labor, and governmental operations. And if that is the case—and I think it is going to be the case—I think we are going to see another substantial increase in the collection of useful statistics, and I think it is going to be statistics in this multiplication of various kinds of variables that we are talking about.

Representative TALLE. Before I make my final statement, I think it appropriate that I say for the subcommittee that the services of its director, Dr. Grover Ensley, and the clerk, John Lehman, and their associates have been of genuine value. They have worked very hard, very carefully, and most diligently and enthusiastically to promote this hearing. I should like now to recognize Dr. Ensley.

Mr. ENSLEY. Thank you, Mr. Chairman.

We have referred a good deal in the last 2 days to a system of Federal statistics, or a Federal statistical system. I would like to say that I believe that in this area, as in other areas, we should distinguish between the responsibility of the executive branch of the Government and the legislative branch under our Constitution and statutes. Both have an important role.

The executive branch has the clear responsibility for formulating a Federal statistical system. It has the responsibility for executing this program.

It seems to me that the role of the Congress is to consider and authorize and review the Federal statistical program. So while this subcommittee can provide a forum helpful to all concerned, it will not in any sense alter the responsibility of either the Congress or of the executive branch to carry out their respective responsibilities and to take the steps that are needed to develop a sound statistical system.

Thank you.

Representative TALLE. The bell which I have been speaking of, you have now heard. It is most fortunate that it came so late in the day because I believe we have finished and without interruption by call to duty in the House until now.

I merely want to return to our starting point. I said yesterday morning that under the Employment Act of 1946, there was established the Joint Committee on the Economic Report. Last February 27th, this Joint Committee issued its report, and did it on time. The deadline was March 1. In response to a recommendation in that report, a Subcommittee on Economic Statistics was selected and assigned a task to perform. The subcommittee chosen was made up of Senator Carlson, Congressman Bolling, and myself as chairman. Together with the staff we proceeded to make the best plans we could. We invited the cooperation of people who were scholars in the field, specialists. We invited the cooperation of the Executive Department of Government.

The invitations were responded to with enthusiasm, and the help that we asked for you have given, and we hope that you will give more.

It is very encouraging to the subcommittee to have this fine cooperation, and as chairman of the subcommittee, I want to say a sincere "thank you" to all the panel speakers, to all representatives of Government agencies, and also to the auditors who have been here throughout these days. I have never seen such enthusiasm expressed in connection with any other subject that one might consider somewhat prosaic. There is relatively little romance in statistics.

The science of economics used to be called "dismal," and no doubt the Malthusian theory of population combined with the Iron Law of Wages rather justified the melancholy term "the dismal science." But I have observed nothing to indicate at these hearings a dismal feeling whatever. You responded so cheerfully that Congressman Bolling and Senator Carlson and I repeat a sincere "thank you."

The hearing is adjourned.

(Whereupon, at 4:30 p. m., the hearing was adjourned.)

(The following material has been received for inclusion in the record as noted on p. 288:)

LEHIGH UNIVERSITY,
Bethlehem, Pa., June 21, 1954.

Representative HENRY O. TALLE,
Chairman, Subcommittee on Economic Statistics,
Joint Committee on the Economic Report,
Congress of the United States, Washington, D. C.

DEAR SIR: Your announcements regarding the study of economic statistics are very interesting to me. Your request to submit written observations has been taken literally, and I am enclosing a statement on improvement in market situation data needed for forecasting, and a list of general projects needing attention in developing data. These are sketchy outlines, but I think they indicate the trend of my thought.

Sincerely,

ELMER C. BRATT, *Professor of Economics.*

IMPROVEMENT IN MARKET SITUATION DATA NEEDED FOR FORECASTING

(By Elmer C. Bratt)

I. Nature of market situation data

Includes information on new orders, unfilled orders, sales, prices and inventories.

II. Data on orders are useful in indicating market demand, notably as reflected in changes in new orders. The difficulty is, however, that new-order series move very irregularly.

1. The picture would be much improved if data on desired delivery time for orders were available. The greater the confidence, the longer the delivery time tends to become. The needed distribution will differ with industries, but tentatively the following classification might be tried: Delivery time up to 1 month; 1 to 6 months; over 6 months; unspecified.

2. Some effort might be made to get sellers to distribute unspecified delivery times, but this information should be kept separate.

3. The data on delivery time desired when orders are placed would provide added data against which movements may be checked. This is especially important in trying to decide whether a decline or rise in new orders is an irregular fluctuation or an indication of a more fundamental shift.

III. Data on business inventories most urgently needed in forecasting economic change are those that clarify the distinction between planned and unplanned inventory accumulation.

1. This distinction is most clearly brought out in the division between purchased-material and finished-goods inventory. Fortunately, the definition of these types employed by the Department of Commerce industry survey is the appropriate one for use in forecasting economic change.

2. Unfortunately, however, no divisions of the durable and nondurable goods industries are available for these categories. If they were, it would be easier to see more clearly where unplanned inventory accumulation is occurring.

3. Information, especially in the case of raw-material inventories, shown be shown separately for inventories not promptly available when ordered. Some minimum number of distinctions should accompany such data, e. g., inventories not promptly available because of tight supply conditions and inventories not promptly available because of the distance supplies must be shipped. Such information reflects on the extent to which raw-material inventory accumulation is truly planned.

IV. Data on consumer inventories are most urgently needed. The Survey Research Center should be requested to provide such information through sample surveys. The reason for the importance of this information is that frequently a critically significant part in net expenditure movements is played by consumers, and presumably largely dependent on the condition of consumer inventories.

1. Although difficult, the simplest area of investigation is that of durable goods. The difficulty derives from the development inevitably required on the concept of a "normal" or "sufficient" or "saturated" supply. Apart from this, however, just information on changes in the supply in use would be very revealing.

2. Consumer apparel inventories are also greatly needed. It is to be granted that difficulties involved in collecting such information are great, but some data are better than nothing. To illustrate the importance, I think that the level of such inventories last year is a major factor in accounting for the extent that expenditures for apparel have been maintained this year (see Journal of Business for January 1954).

V. There are intriguing possibilities in classifying price movements, but it would appear that considerable spade work must be done before they are developed by the survey method; in fact, it is possible the best method may not be to inquire of those reporting price quotations with regard to these classifications.

1. It would be very useful to see separately the average movement of prices set primarily on the basis of costs from the average movement of prices more promptly reflecting market conditions.

2. It would be useful to see separately the average movement of prices where changes in supply rather than changes in demand are the most important determinant of the change.

3. It must be noted that the price classification suggested here imply a shortcutting of many important theoretical difficulties, giving the suggestions a highly experimental flavor.

VI. Other possibilities undeveloped in this outline.

1. Quality of unfilled orders (extent of order duplication).

2. Flow of goods contrasted to entry of sales.

3. Difference between quoted prices and prices at which orders are currently filled.

4. Shifts in price discounts, extras, etc., overtime.

List of General Projects Needing Attention in Developing Data

(By Elmer C. Bratt)

I. Development of type of plans made. Most notably, survey to find the extent of and kind of explicit planning companies make in developing figures reported to SEC-DC survey on plant and equipment expenditures.

II. Development of a separate distribution of total gross expenditures made on the market, nonduplicative in a sense similar to GNP, but eliminating imputed payments.

III. Efforts should be made to develop a money flow system analogous to that suggested by Morris Copeland, although refinement in some of his concepts, notably in his transfer payments category, may be required. This would put interrelations occurring in the economy in a broader perspective. It would give recognition to the fact that intermediate expenditures may play a vital part in influencing economic change.

THE ECONOMETRIC INSTITUTE, INC.,
New York 17, N. Y., June 24, 1954.

Hon. HENRY O. TALLE,
House of Representatives, Washington, D. C.

MY DEAR REPRESENTATIVE TALLE: Thank you for your letter of June 23. I am enclosing a recent criticism which I made of housing statistics and which I believe will meet your requirements. You will notice I say, "The estimates, of course, cannot be regarded as accurate and are presented only to show the great gaps that exist in public statistics. They indicate clearly that there are no experts on the demand for housing." And I add, "Although Government figures prior to 1940 were not too inadequate, the gaps since 1940 in official data relating to housing are appalling and until they are filled there can be no scientific forecast of the demand for housing."

I am also sending you a criticism of retail trade figures which we recently made for one of the leading groups of department stores.

We have, from time to time, made recommendations which would straighten out most of the difficulties. For example, as long ago as 1945 I recommended that the Census Bureau revise its sampling of household formation data so as to relate the error of estimate to the change in households rather than to the absolute number, the reason being that the change is the important factor in market analysis. Nothing has been done about this suggestion.

More power to your committee.

Cordially yours,

CHARLES F. ROOS, *President.*

The importance of new households as a measure of the demand for new housing has been continuously stressed by The Econometric Institute since its beginning. Yet Government statistics on both the number of households and residential construction are so bad today that even intelligent guesses as to the levels of demand are difficult.

As we have pointed out the Bureau of the Census did not reconcile the discrepancy in its 1950 figures on the number of households until April 1953. The number of households reported by the Census of Population has now been revised upward by about one million and the number reported by the same Bureau's Survey of Population by several hundred thousand.

But there is an even more important discrepancy in housing statistics. The Bureau of the Census reported 37,325,000 housing units standing in 1940 and 45,983,000 in 1950. There was thus a gain of 8,658,000 units during the 10-year period. The Bureau of Labor Statistics has estimated that 5,684,000 nonfarm units were started during this period; and the Department of Agriculture has estimated that 864,000 farm units were built. Thus, we had 2,110,000 more housing units in existence in 1950 than is indicated by the starts. This is equivalent to about 2 years of building as measured by BLS starts.

There is no official reconciliation of these figures, yet obviously no reliable forecast of the demand for housing can be made until there is such reconciliation.[1] Table VIII–D represents an attempt at a reconciliation. The Bureau of Labor Statistics series on nonfarm starts is shown in column (2), the census series of housing inventories are shown in columns (16), (17), and (18) for census dates. Trailer production is shown in column (7) and temporary public housing in column (8). The other columns have been filled in by crossword puzzle and interpolation methods. Where informed estimates of decade totals are available they are given and annual figures are calculated from sample or interpolating series. The estimates, of course, cannot be regarded as accurate and are presented only to show the great gaps that exist in public statistics. They indicate clearly that there are no experts on the demand for housing.

Much of the discrepancy of 2,110,000 units which has developed in the 10-year period, 1940–50, is traceable to conversions of old large unit houses and apartments into small units.[2] While there are no official figures on conversions, it is

[1] The Bureau of Labor Statistics on February 28, 1952, made an unofficial explanation of most of the discrepancy between its figure of 5,853,000 new permanent nonfarm dwelling units and the census estimate of a 9,707,000 increase in nonfarm housing inventory.

[2] This term is taken to mean the splitting up of large units into smaller ones, rehabilitation of units previously regarded as uninhabitable, nonresidential units converted and seasonal homes to which minimum facilities were added.

probable that they amounted to about 1,650,000 units during the 10-year period. As indicated by table VIII–D, temporary public housing added another 600,000 units; trailers amounted to about 300,000; tourist cabins, labor camps, etc., to about 350,000; and 1-room marginal units to about 150,000. Thus the total additions for the period 1940–50 probably amounted to 9,598,000 units or 3,050,000 more than the 6,548,000 units represented by the sum of the Bureau of Labor Statistics' 5,684,000 of nonfarm starts and the Department of Agriculture's 864,000 of farm starts. Demolitions and disaster losses probably amounted to about 977,000 units, so that the net additions were something like 2,073,000 or about 37,000 less than reported by the Census Bureau. These 37,000 units, of course, represent differences in definition, dates, and errors of estimate and sampling. Indeed, these types of errors were probably much larger than this 37,000 figure.

Our table VIII–D presents a much better and more accurate picture of what has probably happened to the housing supply since 1940 than the official figures of the Government. Although Government figures prior to 1940 were not too inadequate, the gaps since 1940 in official data relating to housing are appalling and until they are filled there can be no specific forecast of the demand for housing.

We assume that in April 1950, when the census was taken, the United States had 39,625,000 nonfarm housing units and 6,358,000 farmhousing units or a total of 45,983,000 units. Since that time we have built something like 4,700,000 nonfarm permanent units, about 550,000 farm units.

TABLE VIII–D.—*Changes in housing inventory*

[Thousands of units]

Year	New construction			Conversions			Trailers	Temporary public housing
	Total	Nonfarm	Farm	Total	Nonfarm	Farm		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1925		937			13			
1926		849			14		2	
1927		810			15		4	
1928		753			16		5	
1929		509			17		6	
1930		330			83		6	
1931		254			52		8	
1932		134			37		6	
1933		93			51		4	
1934		126			64		6	
1935		221			83		8	
1936		319			94		10	
1937		336			91		14	
1938		406			83		8	
1939		515			87		12	
1940	688	603	85	96	95	1	13	
1941	789	706	83	104	102	2	11	12
1942	410	356	54	119	115	4	2	182
1943	234	191	43	60	52	8	2	206
1944	175	142	33	111	99	12	9	35
1945	239	209	30	156	142	14	16	21
1946	780	671	109	233	217	16	47	137
1947	986	849	137	250	232	18	70	6
1948	1,077	932	145	273	259	14	85	1
1949	1,170	1,025	145	248	237	11	45	
1950	1,546	1,396	150	210	200	10	72	
1951	1,251	1,091	160	225	213	12	83	
1952	1,272	1,127	145	210	197	13	68	
1953	1,237	1,102	135	200	190	10	85	

TABLE VIII–D.—*Changes in housing inventory*—Continued

Year	Cabins, labor camps, etc. (9)	1-room units (10)	Total additions (11)	Demolitions and disasters			Total net additions (15)	Housing inventory, year end (16)
				Total (12)	Nonfarm (13)	Farm (14)		
1930 [1]					30			
1931					36			
1932					28			
1933					23			
1934					28			
1935					39			
1936					42			
1937					53			
1938					45			
1939					47			
1940	3	2	802	78	57	21	724	37,725
1941	7	3	926	51	35	16	875	38,600
1942	10	5	728	40	25	15	688	39,288
1943	30	8	540	37	21	16	503	39,791
1944	25	10	365	53	35	18	312	40,103
1945	15	15	462	92	69	23	370	40,473
1946	35	22	1,254	126	92	34	1,128	41,601
1947	60	28	1,400	161	115	46	1,239	42,840
1948	80	30	1,546	178	126	52	1,368	44,208
1949	85	27	1,575	161	115	46	1,414	45,622
1950	82	20	1,930	135	100	35	1,795	47,417
1951	80	15	1,654	125	95	30	1,529	48,946
1952	70	12	1,632	115	90	25	1,517	50,463
1953	75	10	1,607	110	90	20	1,497	51,960

Year	Housing inventory			Net new nonfarm additions (19)	Transfer farm to nonfarm (20)	Total net nonfarm additions (21)	Households (22)
	Total year end (16)	Nonfarm (17)	Farm (18)				
April 1940 [2] [3]	37,325	29,683	7,642				
1940	37,725	30,050	7,675	659	120	779	35,127
1941	38,600	30,946	7,654	806	90	896	35,875
1942	39,288	31,666	7,622	645	75	720	36,498
1943	39,791	32,234	7,557	468	100	568	36,938
1944	40,103	32,782	7,321	285	263	548	37,173
1945	40,473	33,351	7,122	349	220	569	37,588
1946	41,601	34,632	6,969	1,037	244	1,281	38,324
1947	42,840	36,053	6,787	1,130	291	1,421	39,636
1948	44,208	37,578	6,630	1,261	264	1,525	41,241
1949	45,622	39,132	6,490	1,304	250	1,554	42,714
April 1950 [3]	45,983	39,625	6,358				
1950	47,417	41,102	6,315	1,670	300	1,970	44,121
1951	48,946	42,759	6,187	1,387	270	1,657	45,139
1952	50,463	44,383	6,080	1,384	240	1,624	46,074
1953	51,960	45,995	5,965	1,372	240	1,612	47,019

[1] No data available prior to 1930.
[2] No data available prior to 1940.
[3] Data from U. S. Department of Commerce, Bureau of the Census.

Federal Reserve Board data

1. Although all department-store sales data now have the same base period (1947–49 equals 100), there are three sales releases available for department-store data. They are:

(*a*) H.8.a. Weekly total store sales index seasonally unadjusted.

(*b*) G.7.2. Monthly total store sales index both seasonally unadjusted and seasonally adjusted. These are daily average sales.

(*c*) G.7.3. Monthly departmental sales indexes seasonally unadjusted. These are total sales for the month.

2. Whereas all three sets of data are only useful if they measure total department-store performance, only the G.7.2 (line 39, base book) is related to census data. Neither of the other two series is at the same index level although the weekly data are, by far, better than the departmental data.

3. The departmental sales data (G.7.3) are actually the performance of approximately 365 independent stores of which the sample is comprised. Even here, the data for the various departments are not truly representative of the total sample since the number of stores reporting sales of different divisions vary both among the divisions and from month to month. For example:

February 1954:	
Stores reported for main store data	382
Stores reported for men's and boys' wear data	362
Stores reported for men's clothing data	295
Stores reported for men's and boys' shoes data	216
December 1953:	
Stores reported for main store data	364
Stores reported for men's and boys' wear data	346
Stores reported for men's clothing data	283
Stores reported for men's and boys' shoes data	209

	G.7.3	G.7.2
	Percent	*Percent*
May 1952–51	−1	[1]+6
June 1952–51	−2	+7
August 1952–51	−1	+5
May 1953–52	0	[1]+6

[1] The increase on increase in 2 succeeding years. These differences are, in part, due to the fact that the G.7.2 data are average daily sales data while the G.7.3 data are monthly totals. However, the following selling day schedule indicates that the big difference is in the inconsistencies of the data, not in the selling day factor.

4. The departmental data (G.7.3) are actually the performance of the approximately 365 independent stores of which the sample is comprised. At times it varies widely in the percent change from year earlier levels from the performance of the monthly total store sales (G.7.2) data. For example:

Selling days in May

	1951	1952	1953
Monday	4	4	4
Tuesday	5	4	4
Wednesday	[1] 5	4	4
Thursday	5	5	4
Friday	4	[1] 5	5
Saturday	4	5	[1] 5
Total weekdays	22	21	21
Saturdays	4	5	4

[1] Decoration Day fell on this day of the week. Decoration Day is a holiday, except in the South; consequently it is not shown in the total.

5. The index of monthly total store sales for the year 1953 averaged 112 (1947–49 equals 100). The departmental sales data (total store weighted data) averaged 103. This is a total difference in growth of 9 percent in a 4-year period of time. This may be partially explained by the fact that the departmental sample is comprised of large-volume stores and, as we have found in our studies, this type of store is sluggish in its response to income. That is to say large-volume stores generally have low alpha relationships to income.

6. On February 15 the FRB index of textiles and apparel (seasonally adjusted) was reported to be 92 for January. On March 15 the January figure was revised to 95. On April 15 it was reported to be 97.

Department of Commerce data

1. Jewelry store sales data, after declining by more than 30 percent from March 1953 to October 1953, were discontinued as a separate item, although still a part of total durable-goods sales.

2. There is constant revision of sales data until 4 months after sales actually occurred. These revisions are often substantial. For example, January 1954 sales of apparel stores were—

(*a*) Estimated at $760 million in February.
(*b*) Revised to $829 million in March.
(*c*) Revised to $845 million in April.

Thus, from February to April the January data were revised 11 percent. Sales of family apparel stores for January 1954 were not reported in the March SCB, although one could calculate the sales estimate to be $136 million by the process of elimination. In the April SCB the data were reinstated and January 1954 sales were reported to be $163 million—a revision of 20 percent.

3. Seasonals are not realistic as used by the Department of Commerce in reporting retail sales.

4. Department of Commerce data by type of store are not a good indication of retail sales by product line because of the trend of limited line stores to handle a wider range of merchandise.

5. Department of Commerce makes no effort to reconcile their estimates of sales with their data on consumers' expenditures. They maintain that "the causes of the differences are too complicated to permit adequate measure." Obviously, this is not true if both series represent actual market performance.

6. In September 1952 the Department of Commerce revised their retail sales estimates in line with the 1950 census data and also incorporated a new estimating procedure. No attempt has been made to adjust consumers' expenditures data. In addition, the retail sales were only revised beginning with 1951 data and no consistent historical sales data are available from the Department of Commerce prior to 1951. The institute, however, has estimated retail sales by type of store for the years prior to 1951.

STATEMENT ON THE ECONOMIC AND STATISTICAL NEEDS OF GOVERNMENT, SUBMITTED ON BEHALF OF CIO, BY STANLEY H. RUTTENBERG, DIRECTOR, DEPARTMENT OF EDUCATION AND RESEARCH, CIO, AND KATHERINE P. ELLICKSON, ASSOCIATE DIRECTOR OF RESEARCH, CIO

Your committee hearings on Government statistics are a most encouraging sign, and we hope that your deliberations will result in constructive congressional assistance in this field.

Reliable, realistic data are essential for democratic solution of the Nation's economic and political problems. Of prime importance are statistics and other material that will further the expansion of the economy as rapidly as resources permit. Losses resulting from economic contraction are incalculably greater than proposed expenditures on economic research that would help to avoid such tragic loss. We in the CIO have a special interest likewise in statistics necessary for mature and sound collective bargaining.

The Federal Government must play a major role in supplying basic economic data since business statistics are restricted in scope and sometimes biased, unions have limited resources, and other private institutions have inadequate powers and funds. Only the Government has the necessary authority and jurisdiction in many fields. The Federal Government can and should cooperate with State and local governments, but it must assure uniformity and adequacy.

IMPORTANCE OF CONGRESSIONAL ACTION

The role of Congress in relation to Government statistics is crucial in its effect on both volume and quality.

Congress can encourage good statistics of high caliber, reconcile proposals with fiscal policy; encourage long-term planning; and review achievements and needs.

We have watched the effect of congressional action on the Government research agencies for many years. We sincerely believe that the most vital influence for improvement would be a conviction on the part of the Congress, and more particularly, of certain key Members of Congress, that the Government agencies responsible for gathering statistical data and analyzing economic trends should be empowered to carry out these responsibilities with sufficient funds to plan ahead and to employ an adequate staff. The search for knowledge in the field of economics is a difficult one. Civil servants are beset with many difficulties. One of the greatest has been the task of winning sympathetic understanding from congressional appropriations committees. Too often they have been met with skepticism as to whether statistics are of value.

RECENT DETERIORATION

The present status of Government statistics and economic analysis is highly discouraging. Curtailment of funds, year after year, has led to deterioration of the volume, quality, and promptness of Federal statistics. The top staff people in many bureaus are stretched too thin and are overworked, so they cannot do the type of creative thinking required. In the Bureau of Labor Statistics, for example, little opportunity for analysis is left. The funds available are used for turning out series in reduced number.

Continuing uncertainties and repeated failure in efforts to obtain more funds increase frustrations. Many excellent people have understandably left for more remunerative and intellectually rewarding opportunities. The quality of staff has thus been diluted.

We have great respect for many employees of the Federal research agencies. We know that they deserve more credit than they frequently receive for competence and devotion to public service and ecoonmic knowledge. They have made many notable improvements in techniques and methods of analysis. But often they have carried on with little encouragement from those most influential on Capitol Hill.

The trend is not a new one, but the present economy move has imposed new slashes where none could be afforded. Instead of expanding research so that our economic system might function more adequately on the basis of informed decision, pennywise and pound-foolish budget planning and appropriation slashes by Congress have distinctly lowered both the quality and quantity of work in the last year and a half.

The Bureau of Labor Statistics has had its funds and staff cut because certain Members of Congress do not like the Labor Department. The Federal Trade Commission has been denied sufficient funds because other Congressmen, reflecting the position of business groups, do not like to see the results of proposed surveys and studies. When such cuts occur, certain continuing activities have to be maintained even though they may not be as important to economic understanding as special projects or new studies. But new projects, or even improvements in old series, can with difficulty be initiated when there is not enough money to carry on present work.

Space does not permit the marshalling of evidence but plenty is available. One sad illustration is the degree to which the Bureau of Labor Statistics is turning to mail questionnaires rather than field surveys, is limiting the type of information it collects, and has had to resort to private institutions for money to complete jobs which are properly the responsibility of the Government.

Federal agencies should not be so starved by Congress that they turn to private sources for essential work. Even where sources of high reputation are used, distorting influences may result.

The Bureau of the Census has suffered heavily through delay of authorization for basic censuses. The effect of cuts in the census activities is reflected in the report of the intensive review committee to the Secretary of Commerce.

Influential business groups, through their emphasis on economy, have helped to force reductions in Federal statistics, although in some instances they realize belatedly they have deprived themselves of essential facts. Their activities reducing Government data are the opposite of their efforts to increase private research for objectives such as market analysis.

HIGH STANDARDS OF INTEGRITY

We do not mean to imply that the administration of the research agencies could not be improved. But the attitude and actions of Congress could provide a much more encouraging atmosphere as well as attracting a larger number of topnotch employees. We know from contacts over the last years how badgering by congressional committees and repeated chopping off of funds tend to wear down even the most optimistic spirits.

The leadership of Government spokesmen in maintaining high standards in objectivity in the use of figures is also an important influence on quality. When a responsible head of an agency misuses official figures to justify his political views, this very act, even without additional or open efforts to influence conclusions, puts pressure on devoted and highly competent people to shape research results to political ends.

When an effort was made to compel the Bureau of Standards to distort its conclusions in regard to a battery additive the integrity of the agency was finally upheld, though individuals suffered. In economic and social fields, where evidence may be less clearcut, it is even more important to take every precaution to ward off pressures and distortions. The present high reputation of Government statistics may be protected only if congressional cuts in funds and political pressures are stopped.

Another essential in maintaining quality is to explain fully the shortcomings of data, whatever their cause. A full explanation of methods used in developing statistics is essential for a proper judgment of their value and limitations. Such explanations, of course, do not justify the release of unreliable data, but are rather an essential accompaniment of every research project. Only by an explicit statement of limitations can one highlight the problems that remain to be solved. Considerable improvement in this regard has been achieved in the last decade. But bureaus or divisions still are sometimes reluctant to admit publicly that their data have serious shortcomings. They are often influenced in part by the attitude of some Congressmen who fail to appreciate the value of statistics if their limitations are mentioned.

The realistic collection and interpretation of data are promoted by employing staff who not only have good professional training but also know the realities of the practical situations with which the data are concerned. Such staff background should be supplemented by consultation with persons who have intimate knowledge of needs, customs, terminology, etc.

CONSULTATION WITH LABOR

We have appreciated the degree to which consultation with labor advisory committees has been developed in the last decade, paralleling similar consultation with business and other consumer groups. A joint labor research advisory committee has met with the Bureau of Labor Statistics, and a similar labor advisory committee, established at the invitation of the Bureau of the Budget, has met jointly with the Office of Statistical Standards of that Bureau and other Government agencies in whose work labor has been interested. Such consultation has been fruitful for us and has resulted in various valuable suggestions now incorporated in Government programs.

In our meetings with the various Government agencies we have dealt with many of the problems under review by your committee. We have made recommendations for additional types of studies which have not been realized because of lack of funds or other obstacles. We cannot hope now to condense our recommendations in one memorandum. We shall within a few days transmit additional supplementary statements on specific subjects.

We have attempted in this introductory statement to summarize our general appraisal of the basic factors affecting Government statistics and economic analysis. We shall deal briefly in the following pages with certain fields of especial interest to us.

Limited though this overall statement must necessarily be, it does represent the results of many years of consideration of these problems by the various CIO research people on the staff of our national and international unions as well as the CIO Department of Education and Research. Many of these research directors have helped prepare the detailed statements which we shall submit as supplements. We have drawn especially heavily at this time on contributions by Solomon Barkin of the Textile Workers Union and Nat Weinberg of the United Automobile Workers.

COMPULSORY REPORTING

Before proceeding to a consideration of specific fields, one additional problem should be mentioned, which has given us great difficulty in many fields. Much essential information must be secured from corporations or other business groups who may not wish to supply the information even if they have it readily available. Wage surveys, for example, have frequently been blocked by the unwillingness of employers to open their records for Government use. For years we have urged the Bureau of Labor Statistics to list names of companies covered by wage surveys so that we may judge the representativeness of the results. The Bureau is exploring the matter further, but so far the participants in the sample are unknown to us and other users.

In many other fields, the Bureau of Labor Statistics is similarly handicapped by its dependence on the voluntary cooperation of employers both for regular statistical series and for special studies. Such dependence not only results in lack of data, but makes a Government agency unduly sensitive to employer criticism and ocassional threats of boycott. Such a threat occurred in the late 1930's when the Labor Department published an analysis of company unions. The automobile industry threatened to withhold data, as revealed by the La Follette investigating committee, and the trade association in the automobile industry ever since has acted as the clearinghouse through which the automobile manufacturers submit data to the Bureau of Labor Statistics.

The Federal Trade Commission and the Bureau of the Census have mandatory powers for collecting essential information. The Bureau of Labor Statistics has none. We believe this subject of mandatory reporting of essential information deserves careful consideration by your committee. We are convinced that the Government cannot afford to be deprived of essential information because business will not yield it voluntarily.

The Government's powers for mandatory collection of data should be expanded and utilized to secure basic material on wages, corporate finances, employment, production, and other topics of vital interest to the American people.

Business, because it possesses crucial information, has no right to use it exclusively. We have even been confronted recently by a situation in which automobile companies have asked the Government to compile data for them on automobile sales and inventories, but have insisted that the total figure thus derived be made available only to the participating companies, not to the public or the United Automobile Workers, CIO. The Department of Commerce has acquiesced to this arrangement.

MAJOR PROPOSALS FOR IMPROVING CURRENT STATISTICS

We shall deal primarily with the proposals of greatest interest to us, adding briefer explanations on additional items. This treatment understates our range of interest, which encompasses the total functioning of the economy as well as the many specific problems which confront our members as workers and typical citizens.

1. Coordination and uniformity

You refer in your committee statements to the desirability of establishing a coordinated general system of Federal statistics. We believe that coordination might well be increased, and that continued review of the adequacy of the total program is desirable. We have discussed these matters more than once with the Office of Statistical Standards of the Bureau of the Budget. We have been impressed with the efforts made by that division to maintain high standards of quality and to consider desirable additions to current activities as part of a well-rounded program. A reasonable balance must, of course, be maintained between uniformity and coordination, on the one hand, and reasonable freedom in experimentation, on the other, especially in new fields.

At present, agencies such as the Bureau of Labor Statistics and the Census Bureau place an identical business establishment in different industry classifications, and likewise differ as to the business units considered part of an establishment. It would be helpful if the Office of Statistical Standards would establish and maintain a single master list classifying all known establishments in all industries in accordance with the standard industrial classification system. Agencies engaged in data collection would be required to conform to the master list in the classification of the establishments from which they obtain data. If

discrepancies and apparent inconsistencies between series still occurred, differences in industrial classification could not be held responsible for that. Thus, attention would be focused more sharply on the need to investigate and clear up such discrepancies, or at least account for them.

2. Employment and unemployment

Adequate data on employment and unemployment are indispensable to a diagnosis of the causes and effects of current economic fluctuations, and thus to the well-being of the American people.

Current material released by Government agencies tends to understate the seriousness of present unemployment. This understatement results partly from inadequate concepts, restricted samples, and limitations in collection techniques and data. The understatement is partly a matter of selection and emphasis in interpretation. Enough information is available to prove the need for immediate action to overcome unemployment and its serious results, but a comprehensive review of statistics in this field is also required.

Proper improvement depends not only on the type of review being made by an interdepartmental committee, but also on adequate funds for experimentation, for expansion of samples, for the development of additional data, and for speedier reporting.

One of our supplementary statements to be submitted shortly to your committee has been developed for the interdepartmental committee. We deal therein with points merely mentioned here, and we hope you will give it due consideration.

The fundamental weakness in the concepts underlying current Census Bureau estimates of the labor force is the notion that an individual's classification should be "dependent principally upon his actual activity, i. e., whether working or looking for work, or doing something else." While this notion may provide a more tangible test than the willing-and-able-to-work concept, it fails to fulfill the most basic need, viz, to determine the extent to which the Nation's available human resources are being utilized in our economy.

The human resources available for productive employment under appropriate circumstances may be much greater than is revealed by existing measures based on the working- or looking-for-work concept. Actually, the decision of millions of persons to enter or withdraw from the labor market is dependent upon their reactions to the condition of the labor market, i. e., the availability of suitable employment, wages offered, working conditions reasonably related to the individual's previous employment, and so forth. Unfavorable conditions discourage many persons, particularly at the margin of employability, from actively seeking jobs although they are genuinely interested in employment. Thus, the current test results in the arbitrary exclusion of a large number of persons who properly belong in the labor-force category.

A better classification system is needed for persons who are temporarily out of the labor force or with a job but not at work. An examination of current classifications suggest that a substantial amount of unemployment is concealed among the persons considered out of the labor force, those on temporary layoffs, those with a job but not at work because of weather conditions, and other groups in the all-other category.

Unemployment is also concealed in the figures on unpaid family workers, both on farms and in small businesses, which have increased markedly.

One proposal in our longer memorandum urges establishing a category of inactive employees, including persons with a job but not at work for various reasons. We also suggest that one approach to more adequate classification of persons on the margin of the labor force would be to explore reasons why individuals had withdrawn from the labor force or entered it. In this connection, information on the family status of women in the labor force is badly needed.

Part-time unemployment should be established as a class for regular reporting. Present occasional studies of part-time workers should be made regularly each month.

The above comments have dealt with the census material. Data on insured unemployment should normally include in totals not only the State figures but those insured under the special programs for veterans and railroad workers. Weekly data on persons exhausting benefit rights should be collected and released along with the weekly material on claims. Without such data on exhaustions, relatively minor changes in insured unemployment are misinterpreted as indicating a decline when actually over 35,000 persons are exhausting their benefit rights each week.

3. Data on manufacturing employment and related suggestions

Such data are required in connection with unemployment and economic stability as well as for information on average earnings and man-hours. The Bureau of Labor Statistics series on manufacturing employment should be expanded to permit finer industrial breakdowns. In technical language, 4-digit industry figures should be developed wherever this breakdown is necessary for an understanding of labor-market conditions, earnings, or hours in a particular industry. The 3-digit breakdown is often not sufficiently homogeneous either for labor-market analysis or for use in collective bargaining. For example, the available data on broad-woven-fabric mills do not permit an intelligent analysis because of the divergent trends in the two 4-digit industries in this group, viz, cotton, silk, and synthetic-fiber mills, and woolen and worsted mills.

A 4-digit breakdown for the automobile industry is likewise badly needed to show the differences between the parts manufacturers and the vehicle manufacturers. We have been blocked in our efforts to obtain this breakdown, apparently because of the resistance of the industry to providing the data. This is another illustration of the need for compulsory reporting.

In connection with these same Bureau of Labor Statistics series on manufacturing employment and related data, more attention should be given to developing separate data for women production workers and to separate treatment of time paid for but not worked, like vacations and holidays.

4. Wages, working conditions and accidents

Present appropriations for studies in these fields are shockingly inadequate. There is a marked contrast between funds made available for research into labor conditions and those granted for detailed study of desirable ways of raising farm crops and animals, to use but one illustration. As a result, the development of more healthful surroundings for wage earners is delayed, and the just settlement of collective-bargaining disputes is hampered.

Repeated rebuffs by the Budget Bureau and Congress have led the Bureau of Labor Statistics to trim its requests to completely inadequate levels. The Bureau naturally feels constrained to take a realistic approach in terms of what Congress may grant.

In the case of industry wage surveys, the Bureau recently submitted a plan to our Joint Labor Research Advisory Committee intended as a 6-year program. The idea of planning ahead is good, so that over a period of time major segments of industry may be covered. In this way, overall data may be developed for considering such matters as improvement in the Federal minimum-wage law. But at present appropriation levels, only a small fraction of American industry would be covered by industry surveys more frequently than every 6 years. Many important industries would be omitted entirely. Labor and the general public are thus left without essential facts required for wage negotiations and wage legislation. Management likewise suffers from absence of broad, reliable figures and from resultant discontent even though many trade associations provide confidential data to their members or their own industry.

The lack of adequate industry wage surveys becomes of special interest to the Government at times when fact-finding boards are established as a result of important disputes, or when the Government administers wage controls as during the Korean crisis and World War II. Reliable data cannot be produced overnight, and needless frictions, suffering, and inefficiencies result from the absence of essential data.

To be properly useful, wage data must be carefully developed. The industry must be realistically defined, so as to follow the lines used in collective bargaining. The proper establishments, or an adequate sample, must be covered. Job descriptions must be carefully developed and followed. All this requires detailed planning and consultation with management and labor people familiar with wage and collective bargaining problems throughout the industry. It is also helpful if the Bureau itself can employ persons familiar with the basic industries.

The Bureau believes in such careful planning, but the more limited the staff, the more difficult the Bureau finds the task of applying these procedures.

The data collected must be sufficiently detailed to be useful. Thus distributions of wages and significant minimum rates are required. In the case of industries utilizing incentive systems, special problems must be explored, such as the omission of nonrepresentative periods during which earnings are below normal.

We have urged the Bureau of Labor Statistics, within the limited funds available, to place more emphasis on industry wage surveys, but the Bureau has tended, over the last few years, to develop community surveys, partly because it could thus provide data desired by Government wage boards in settling local rates. Whatever the wisdom of the Bureau's policy, which we questioned, the result has been a sharp decline in industry wage surveys.

In the case of government employees at the State and local level, extremely little wage information is available. This is a serious problem in view of the general feeling that wage problems of such workers should be settled with a minimum of interference with effective government operation. We might point out here that many other types of information for State and local workers are lacking. All told, the group numbers over four million persons. Here is a big gap that should be filled.

White-collar workers constitute another important group about whom far more knowledge is required.

Data on current wage developments, giving the major results of new collective bargaining agreements or other wage determinations, is of great interest to both management and labor, as well as to government agencies which make wage decisions. The Bureau of Labor Statistics has cut the coverage of its reports in this field so that information on smaller firms is no longer available.

Mention was made in the first part of this statement of the need for compulsory reporting. Lack of mandatory powers has resulted in refusal of employers to furnish data and unrepresentative results where only some employers complied with the request for voluntary cooperation.

Many other aspects of work on wages require substantial improvement. In national income data it is desirable to separate wages from the salaries of executive and professional people. Little is available on actual annual earnings of wage earners. In the case of farm labor, the wage data now being gathered and used as the basis for prevailing wage determinations under the Mexican contract labor program are highly unreliable.

As for working conditions and industrial hazards, pathetically little is being done on an overall basis. The Public Health Service as well as the Bureau of Labor Statistics and State departments of labor and health are interested in these problems. Much more should be done systematically to avoid needless loss of life, illness, deafness, and other conditions which undermine the welfare and energy of working people.

5. Industrial relations and the labor movement

The important field of industrial relations is given relatively little study by the Federal Government. Because it has been desirable to make friends for the United States among working people in other countries, more attention has been devoted recently to describing the growth and importance of labor unions in this country. Unfortunately emphasis has too often been placed on misleading discussions about raising productivity rather than on the ways in which unions have forced improved productivity by securing better levels of living. Much more should be done to explain to Americans as well as foreigners the constructive contribution that unions make to American life. Such aspects of research may be more important than actual statistical data.

6. Productivity

The importance of studying productivity and economic stability has been recognized by the Joint Committee on the Economic Report. We take it that, like the CIO, you are interested in the development of reliable measures of productivity.

Unfortunately, many obstacles line the path of productivity measurement, no matter what approach is used. For over eight years we have participated in careful review of various approaches, through discussions with government agencies and through the Executive Committee of the Productivity Conference established by the Bureau of the Budget and the Bureau of Labor Statistics. The discussions promoted by this group have drawn in leading experts from the academic world and private research groups, as well as from business and labor.

As a result of many discussions we are convinced that much more attention must be devoted by the Government to the development of improved methods of productivity measurement. Both the value-added approach and the physical volume approach from secondary sources are promising, but require much additional work. Direct studies of particular establishments have not furnished reliable material for indexes as tried by the BLS. While definite improvements in

the other methods are being developed by the BLS, it is important that the Bureau not feel pressured into publishing statistical results to justify continued work and appropriations.

As in other fields, the natural interest of appropriation committees in tangible output tends to make the Bureau feel that it must produce final data, even though it knows their limitations, for fear of losing funds or even jurisdiction. This fear may be especially great at present because business groups are influential in the Government and tend to favor the development of the Department of Commerce at the expense of the Department of Labor.

Full consultation with labor and management is necessary to avoid bad mistakes. The Bureau's staff cannot be expected to have the necessary knowledge of the many industries for which they are developing material unless they have help in examining all data from groups directly involved.

The Bureau plans to publish overall manufacturing idexes later this year. The results will have many limitations. For example, productivity increases due to industrial integration will not be reflected, and important segments of manufacturing will be omitted. The results cannot therefore be fully representative for all manufacturing.

If the Bureau decides to publish these or other productivity indexes, we hope your committee will join us in urging the Bureau to make such clear explanations of qualifications and such thorough and complete presentations of its methodology as to focus maximum attention on the problems that must be resolved to develop reliable measurements.

We have emphasized the work of the Bureau of Labor Statistics in the field of productivity because the Bureau has special legal responsibility and is producing final indexes in this field. However, attention must similarly be devoted to the basic data from the Census Bureau and other parts of the Department of Commerce which are utilized by the BLS.

7. Consumers Price Index

The development of reasonably reliable price indexes is essential to studies of economic trends. Our attention has been devoted especially to the Consumers Price Index because of its immediate effect on our members. We are submitting a separate memorandum on this subject outlining certain continuing deficiencies.

As pointed out in that memorandum, substantial differences in methods of pricing exist as between the Consumers Price Index and the index of prices paid by farmers published by the Bureau of Agricultural Economics. The differences in methods of pricing for the two indexes bring different results in their movement. The BAE method is more flexible and tends to result in greater rises during good times or inflation, and in greater drops during deflation. At the time when the farmer relies on it for support in setting a floor under prices, it exaggerates the drop in prices actually paid by the farmer. The worker finds the BLS index to be most inadequate in periods of rising prices. We are not contending that either technique is correct or incorrect, but a disparity in effect results from the difference in method.

The disparity between the indexes urgently requires serious study so that a uniform method of pricing may be developed which would assure both groups, whose incomes are dependent in important part on these indexes, just treatment in good times and bad. We urge this committee to support the initiation of such a study without delay.

Limitation in funds has delayed tabulation of expenditure data collected for the year 1950 as a basis for developing the weights for the Consumers Price Index. The Bureau of Labor Statistics has sought private funds for these tabulations and has found a donor. This is another illustration of abdication by the Government of its responsibility to finance projects already undertaken which are essential for the development of better understanding. Even though the material may now be made available, the delay has been very unfortunate.

The tremendous amount of price data gathered by the BLS in connection with the CPI could well be utilized for exploration of current business policies. One example would be to investigate the degree to which recent excise-tax cuts have been reflected in prices. Another fruitful topic for exploration would be the stability or flexibility of prices of specific goods over a period of time, as well as the uniformity of prices for similar items in different localities.

8. Business financial statistics

Current data on the financial results of business operations are essential to an understanding of the functioning of the economy. Public policy on taxes, credit,

protection of competition, and stimulation of business investment, depend on our knowledge of the income and costs incurred by business. Yet current statistics on this vital aspect of the economy are a patchwork of partial data, adjustments, and estimates. Moreover, the detail available is not adequate for a meaningful analysis of business costs and rates.

These conclusions are explained in a separate memorandum on evalution of business financial statistics, which we believe deserves careful attention. It makes specific suggestions for improvements in existing series and reports.

Better data would help provide necessary insights into cost-price-profit relationships. More should be available on labor costs, properly differentiated, and on executives' remuneration.

On the latter point a certain amount of information has been made available in the past as a result of requirements of the Securities and Exchange Commission. But the detail that must be reported has been decreased instead of increased.

Special attention should be devoted to the large sums which are diverted through various devices to members of an inside management group through special arrangements such as purchasing or dealer companies.

A key question in connection with full employment is the matter of break-even points, that is, the level of operation at which corporations can carry on operations without losing money. This question is closely related to the degree to which prices in certain industries are determined by administrative decision rather than free operation of competition. There is considerable evidence that the administration of prices is more widespread than ever, so that more corporations than formerly are able to make large profits while running far below capacity and employing fewer workers or reducing the workweek drastically.

In addition to exploring break-even points, provision should be made for compiling data on the capacity available for producing each major type of manufacture and for reporting the proportion of such capacity which is currently being utilized.

9. Economic structure and business policies

In addition to statistical data, the Nation needs far better understanding of the structure of American industry, of the considerations which shape business policy, and of the role that key decisions play in the functioning of the economy.

This tremendous subject is at the heart of the problems with which your committee is concerned.

We urge your committee to give these matters the attention which they deserve.

Certain earlier Government studies suggest the specific subjects that might be included. The Temporary National Economic Committee of the 76th Congress was authorized and directed "to make a full and complete study and investigation with respect to the concentration of economic power in, and financial control over, production and distribution of goods and services." Its hearings and reports contain many valuable data. The National Resources Committee published a basic document in 1939 entitled "The Structure of the American Economy," which likewise points the way.

We are concerned not only with concentration of control, in its many forms, but with the restrictive forces and bottlenecks which prevent the maximum expansion of industrial activity which is so essential for the welfare of our citizens and for successful competition with the world Communist movement.

Some of these topics may be considered dangerous politically, but we urge your committee to have the courage to take a bold stand on the necessity for full public information, even though some business interests may be offended. Our Nation is in too perilous a position to permit fear of internal criticism to weaken us in the current world struggle.

The Joint Committee on the Economic Report in its February report stated: "The outcome of the clash between East and West will in large part be dependent upon productivity advances and relative standards of living. A comparison of the success of the two systems in meeting the ultimate need for consumers' goods and a careful reexamination of the impediments to economic growth in the western countries should throw considerable light on the problem of long-run economic stability in this country."

The "impediments to economic growth" which the committee mentioned must be revealed by a comprehensive study of the type we have suggested.

10. Levels of living, income, savings, and wealth

These subjects are closely related to the topics in which your committee has indicated its interest. A separate memorandum on the subject of savings is being submitted, analyzing present deficiencies and making proposals for further study.

More is usually said about the distribution of incomes than about the distribution of wealth. The latter is equally important in judging probable expenditures and levels of living. It is also relevant to the strengthening of our democratic institutions and preventing undue concentration of economic and political power.

Your committee has already compiled valuable information on persons at the lowest income levels, and you have indicated your concern with data on consumer expenditures and incomes. It seems unnecessary, therefore, to elaborate on the importance of such data. They are basic to improvements in human welfare and national purchasing power, as well as to the development of appropriate policies for prompting full employment and production.

A few specific comments from our experience may be helpful in illustrating how Congress has initiated constructive projects and how lack of funds has led to loss of information.

In 1945, the interest of a Member of the House of Representatives resulted in the development of the city workers family budget by the Bureau of Labor Statistics. This budget provided a concrete picture of workers' expenditures and thus has been useful as a tool for discussion, even though we consider it inadequate. Recent cuts have prevented its continued pricing or the development of an up-to-date budget, which the Bureau considers desirable. We should like to see a series of budgets developed for various family types, based on an American standard of living.

In developing the city workers family budget, the Bureau developed a new method, which was supposed to be published so as to permit evaluation by experts throughout the country. Lack of funds made this impossible.

The Government already has in its possession other material on family expenditures and incomes which it has not been able to process to the degree that is desirable. For example, the Census Bureau, from its questions on income in the 1950 census of population, could develop and make available more information than has so far been possible.

The study of consumer intentions to buy made annually by the Federal Reserve Board would be substantially enhanced in value if additional funds permitted a larger sample and therefore finer breakdowns.

In other words, adequate appropriations are required as a basis for adequate understanding. Because many of these issues touch on sensitive subjects in that they reveal differences as between different areas of the Nation, Congress has a special responsibility to resist pressures that would block the development of data.

11. Special aspects of human welfare

Behind the statistics are the people to whom they refer. Tabulations, index numbers, and calculations in dollar figures for the total economy must be supplemented by more basic understanding of human problems as they now confront the American people.

More research is required on illness, on mental health and its relation to physical ailments, on constructive methods of education, and many related topics. such research may be statistical but also involves an examination of human development and the factors which affect it. Some of this can be done by private agencies, but Government funds are required to expand such research with the rapidity and intensity required.

The continued high rate of rejections by the Selective Service System for physical, mental, and educational reasons is in itself sufficient proof of the need for action. The United States must do a better job of developing our human resources, both for the general welfare and in order that our young men and women may be better able to contribute to national output in a period of crisis.

Necessary improvements in social security require additional information. We refer here to the recent developments in private plans for pensions, sickness benefits, medical-care insurance, and related matters, as well as to the public programs that have been or may be established to provide social insurance and public assistance.

As specific illustrations, more needs to be known about the experience of communities stranded when the main plant shuts down, about exorbitant fees charged by doctors above amounts included in insurance schedules, and about the adequacy of current levels of unemployment-insurance benefits.

CONCLUSION

The Federal Government alone can carry on a coordinated program of statistical collection and economic analysis adequate to the needs of the American people. The cost is infinitesimal compared to the advantages that would be provided for sound judgments by both public and private decision-makers. As a result, human welfare and national wealth would be greatly enhanced.

The Congress plays a crucial part in Government research through its control of the purse strings and the impact of its attitudes on the administrative agencies.

Instead of more adequately meeting current needs, Government statistics have on the whole declined seriously in recent years, due primarily to the drive for economy. Personnel has been reduced in number and quality. Experimental analysis has been discouraged. Services and surveys have been contracted. Questionable procedures have been resorted to such as the use of mail questionnaires for wage studies. Bureaus have turned to private funds for aid. Essential data that have been assembled have not been published.

The Nation is in a period of rapid change, but statistics have fallen far behind.

We have attempted in this document and the supplementary statements to set forth suggestions which we believe would lead to constructive improvement. We shall be glad to cooperate further with your committee and its staff in the development of a long-range coordinated program geared to America's tremendous problems in the atomic era.

(Additional materials supplied in connection with the CIO statement follow:)

CIO Statement on Employment and Unemployment Statistics Submitted to the Committee on Review of Concepts of the Office of Statistical Standards, Bureau of the Budget, and the Subcommittee on Economic Statistics of the Joint Committee on the Economic Research [1]

1. GENERAL COMMENTS

Data on employment and unemployment are among the most crucial measures of the degree to which our society is fulfilling the needs of its members. The importance of jobs to the livelihood and well being of the American people makes it imperative to develop measures of employment and unemployment which are comprehensive, detailed, and accurate. Such data are also indispensible to the diagnosis of the causes and effects of current economic fluctuations.

The fundamental weakness in the concepts underlying current Census Bureau estimates of the labor force is the notion that an individual's classification should be "dependent principally upon his actual activity, i. e., whether working or looking for work, or doing something else." While this notion may provide a more tangible test than the "willing and able to work" concept, it fails to fulfill the most basic need, viz, to determine the extent to which the Nation's available human resources are being utilized in our economy.

We know from our experience in World War II and in more recent years that the labor force is highly flexible. Between 1940 and the peak of the war in 1944 the labor force (as estimated by the Census Bureau) expanded by roughly 10 million, a rate of growth which was 3 to 4 times that which could have been expected as a result of population increase. This remarkable phenomenon indicates that the human resources available for productive employment under appropriate circumstances may be much greater than is revealed by existing measures based on the "working or looking for work" test. Actually, the decision of millions of persons to enter or withdraw from the labor market is dependent upon their reactions to the condition of the labor market, i. e., the availability and distribution of suitable employment, the prevailing level of wages and salaries, the degree of competition for available employment, the

[1] Prepared by Solomon Barkin, research director, Textile Workers Union of America, in cooperation with Nat Weinberg, research director, United Automobile Workers, and the CIO department of education and research.

efforts of employers to recruit and train workers and adapt jobs to the available population, the social attitudes prevailing in the community toward work, etc.

Unfavorable conditions in the labor market discourage many persons, particularly those at the margin of employability (older workers, the handicapped, married women, teen-age youngsters, part-time workers) from actively seeking jobs, although they are genuinely interested in employment and have demonstrated by past performance their ability to perform productive work. Moreover, we must tend to favor every assumption that jobs should be made available for all people, since jobs can be successfully designed to employ them. (See Solomon Barkin, Job Redesign, Technique for an Era of Full Employment, in forthcoming volume on Manpower in the United States, to be published by the Industrial Relations Research Association.) Consequently, the application of the "working or looking for work" test in a period of unfavorable labor market conditions results in the arbitrary exclusion of a large number of persons who properly belong in the labor force category. Certainly, these persons should be counted in the labor force for measuring the extent to which the Nation is fulfilling the policy enunciated in the Employment Act of 1946, "to promote maximum employment, production, and purchasing power" (15 U. S. C. 1021).

The lack of data on a sufficiently detailed and accurate basis is a serious deficiency. It prevents us from determining the precise overall effects upon the population of the functioning of our economy. Moreover, the absence of comprehensive data on unemployment on an area and industry basis deprives us of vital information necessary to an understanding of the problems faced by our members. We need such data in order to analyze the operations of the economy in general, and the textile industry as an example in particular, including its geographic distribution; availability of manpower; effects of technological developments; wage, price, and production policies, etc. In short, these data go to the very heart of the trade union's relations with the industry with which it bargains.

2. SPECIFIC SUGGESTIONS

a. Basic definitions and concepts

(1) *Employment.*—(*a*) Persons who did not work in the survey period but had a job from which they were temporarily absent because of layoffs or because they were scheduled to report for a new job within 30 days should not be classified as employed. If a person's activity during the survey period is to be used as the determinant of his classification, then certainly one who did not work because he had been laid off, or because he was perforce waiting for a new job to start, should be classified as out of work, i. e., unemployed. Whether or not he is to be employed at a later date (and "definite instructions" to report at a later date have a way of being canceled during periods of economic adversity) the fact is that he is not employed as of the survey date. This is the crucial test. Actually, most such persons fall into the category of "frictional unemployment."[2] Obviously, if they are among the unemployed they should not be classified as employed. Many such persons actually receive unemployment benefits.

(*b*) *Inactive employees*

Persons with a job but not at work for reasons of bad weather, industrial dispute, vacation, or illness, or need to attend to personal or family concerns are not being actively employed during such period. They are in fact not available for employment. They should therefore be distinguished separately as "inactive employees," and excluded from the total of employed. These persons should be excluded from the employed as they do not constitute a productive group and are unavailable for work.

(*c*) *"All other groups" of employed persons with a job but not at work*

This group is now embraced in a catch-all phrase. If the above distinction were made of classifying this entire group into either unemployed with a job, or "inactive employees," we could expect the enumerator to allocate employees in this present category into their proper grouping. At present we are unable to appraise the significance of this grouping of 347,000 persons in May 1954.

[2] Defined by Lester M. Pearlman, Leonard Eskin, and Edgar E. Poulton as "unemployment arising from delays involved in changing jobs and filling job openings," in Nature and Extent of Frictional Unemployment, Monthly Labor Review, vol. 64, No. 1 (January 1947), p. 1.

(*d*) *Part-time workers*

Persons who worked part time during the survey period because of economic factors but who usually work full time at their present job should be classified as "partially employed." Similarly, persons who usually work part time at their present job and who would prefer and could accept full-time work, should be classified as partially employed. A breakdown of the labor force into the employed, the partially employed, and the unemployed would be a more meaningful and accurate distribution of the labor force than the current two-way breakdown.

(*e*) *Unpaid family workers*

The recent increase in the number of unpaid family workers in both the agricultural and nonagricultural employments (1,365,000 in agricultural and 404,000 in nonagricultural industries for May 1954) brings to the fore the question as to whether these are truly employed persons. Unpaid family employment is often hidden unemployment. A supplementary survey must be periodically made particularly during periods of keen public interest in unemployment to ascertain the nature of their work and their availability for outside profitable employment.

(*f*) *Changes in labor force*

We urge reviewal of surveys of gross changes in labor force previously reported on a monthly basis and suspended in June 1951. The inquiry should be elaborated to inquire about the circumstances (layoff, termination, illness, voluntary quit, etc.), reasons for quits (marriage, migration, etc.) or entry into labor market, and circumstances for reentry of those not in the market.

(*g*) *Family status of women*

A periodic inquiry should be made of the family status of women indicating marital status and number of children distinguished as between those under 6, 6 to 14, 14 and over. These data will furnish more insight on the opportunities for further recruitment in labor market.

(2) *Unemployment.*—Persons who were not actively looking for work during the survey period should be questioned to determine whether they were interested in working but were discouraged from doing so because of the condition of the labor market. Such persons should be classified as unemployed in line with the concepts discussed under "General comments" above.

An additional question should be addressed to the unemployed person to elicit information on whether he is seeking part-time or full-time work. This information would be of value in determining the types of jobs which may be needed to achieve full employment.

b. Time reference

Unemployment is understated by the present Census Bureau practice of counting individuals as employed, even though they may have worked only 1 hour in the survey week. There is a downward bias in the additions to the unemployed since those persons who lose their jobs during the survey week are not counted as unemployed; however, there is no compensating bias in the reductions of the unemployed: persons who found a job during the survey week (and did an hour or more of work) are counted as employed. The result is an understatement of unemployment as of any particular day and a lack of sensitivity to downward employment trends.

This situation should be remedied. One approach would be to classify these people as partially employed in the survey week. Certainly they should not be counted as fully employed.

The International Labor Office proposed the use of a day instead of a week for the survey period, which would be another possible solution but would involve other difficulties requiring careful evaluation.[3]

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[3] The ILO report stated: "The time reference should be a given day * * * [because] it yields an unimpeachable result * * * calculations of employment status with reference to a long period do not provide an exact measure as of a day." Employment, Unemployment and Labor Force Statistics, International Labor Office, Geneva, 1948, p. 17.

3. GAPS IN DETAIL

a. Employment

The manufacturing employment estimates of the Bureau of Labor Statistics should be made on a four-digit industry basis (Standard Industrial Classification Code) wherever this breakdown is necessary for an understanding of labor-market conditions in a particular industry. Thus, in the textile-mill products industry the available data on the 3-digit group known as broad-woven fabric mills do not permit an intelligent analysis because of the divergent trends of the two 4-digit industries encompassed in this group, viz, cotton, silk, and synthetic fiber mills and woolen and worsted mills. Similarly, a breakdown of the knitting-mills group into full-fashioned hosiery mils, seamless-hosiery mills, knit-outerwear mills, knit-underwear mills, knit-glove mills, and knit-fabric mills is essential for an understanding of the trends in employment in this group of industries. The essentiality of such a four-digit breakdown is equally evident for the automobile industry. Employment trends in the automobile-parts industry are often quite distinct from those in the automobile industry as a whole. The three-digit breakdown is not sufficiently homogeneous for the purpose of labor-market analysis.

The quarterly reports of female employment should distinguish between women employed on production jobs and those engaged in other jobs. The distinction between productive and all employees is made in all other reports and should be carried in this special study of female employment.

The current interest in data on man-hour productivity emphasizes the need of having man-hour data which could be adjusted for the hours paid for but not worked. The monthly report should provide for a separate item on the number of total hours paid for but not worked.

b. Unemployment

The lack of data on the industrial composition of the unemployed (other than the breakdown between agriculture and other industries) is a serious gap in our information since it prevents analysis of the differential impact of unemployment among the various industries. Similarly, the lack of comprehensive data on the geographic distribution of the unemployed leaves us ignorant of the effects of joblessness in the various regions and areas of the country. The tendency of unemployment to concentrate in particular industries and areas makes it imperative that periodic surveys be made to throw much-needed light on the distribution of unemployment by industry and area.

Present series on insured unemployment are not sufficient for these purposes. The State and area information on initial claims and weeks of unemployment compensated by State employment security agencies; weeks compensated under unemployment compensation for veterans; and weeks compensated for unemployment by Railroad Retirement Board, is inadequate for the purpose of State and area analysis because of the limitations inherent in a measure which fails to cover one-third of the wage and salary workers and all of the self-employed persons. Moreover, the exclusion of new entrants to the labor force and workers who have exhausted their benefit rights makes the insured unemployment statistics particularly insensitive to changes in unemployment during periods of depressed economic activity.

Information on the number of workers who exhaust their benefit rights each week should be compiled and published to supplement present insured unemployment statistics. This would give us an insight into the extent to which State unemployment insurance programs fail to provide for the full duration of the individual's unemployment. Such insight is invaluable in appraising the adequacy of the various unemployment insurance programs.

4. FREQUENCY

Detailed information on part-time workers should be made available each month instead of the irregular intervals at which this information has been compiled in the past. The marked increase in the number of persons who were on reduced work schedules because of economic factors between November 1952 and December 1953 (from 826,000 to 1,542,000), and the continued increase in this category (to 1,650,000 in May 1954) makes it clear that this information should be incorporated in the monthly report. Similarly, information should be published monthly on the number and distribution of persons working part-time who prefer and could accept full-time work and on the number and distribution of unemployed persons who are looking for full-time and for part-time work.

5. ADDITIONAL TABULATIONS

Several additional tabulations are necessary for further analyses of reports.

(*a*) In report on "work experience of the population," add a cross tabulation of number of weeks employed in relation to number of weeks person is available for work. It is to distinguish between the work experience of people such as students not available the year-round and those who are.

(*b*) Cross tabulations on industry and occupation should be provided to permit determination of incidence of unemployment.

6. OTHER COMMENTS

The census technique requires careful supervision of enumerators to prevent slipshod reports. Many of the current difficulties in reporting no doubt stem from inadequate supervision.

CIO Statement on Evaluation of Business Financial Statistics Published by the United States Government[1]

Submitted to the Subcommittee on Economic Statistics of the Joint Committee on the Economic Report

Current data on the financial results of business operations are essential to an understanding of the functioning of the economy. Public policy on taxes, credit, protection of competition, and stimulation of business investment depend on our knowledge of the income and costs incurred by business. Yet the current statistics available on this vital aspect of the economy are a patchwork of partial data, "adjustments," "estimates," interpolations, and extrapolations. Moreover, the detail in which current data are available is inadequate for a meaningful analysis of business costs and returns.

Despite obvious and admitted shortcomings, business financial statistics published by Government agencies have not been improved in recent years. Instead, changes in policies by the Government agencies and cuts in appropriations have resulted in the retrenchment of economic research divisions that prepare such data and in the elimination of some previously published series.

For the purpose of evaluating the adequacy of existing measures, business-income statistics may be divided between incorporated and unincorporated enterprises. According to the estimates of the Department of Commerce, the income of unincorporated business and professional enterprises amounted to $27 billion in 1953 (after inventory valuation adjustment) and corporate income before taxes came to $41.1 billion (also after inventory valuation adjustment).

UNINCORPORATED ENTERPRISES

The report of the Joint Committee on the Economic Report on Current Gaps in Our Statistical Knowledge (1948) states that "information on returns to capital and management for unincorporated business * * * is quite incomplete * * * it is urged that attention be directed toward obtaining satisfactory data * * *" (p. 4).

That little progress has been made in obtaining satisfactory data on the income of unincorporated enterprises is indicated by the following excerpts from National Income and Product of the United States, a Supplement to the Survey of Current Business, published by the United States Department of Commerce in 1951:

"Apart from farm income * * * no comprehensive data covering any appreciable time interval exists for the income of unincorporated enterprises. Estimation in this field has generally required the laborious piecing together and adjustment of various types of data from numerous sources, some only inferentially connected with noncorporate business income * * * the National Income Division has periodically reviewed, and materially revised, its estimating procedures in an effort to develop more refined estimates. *No such review, however, has as yet produced really satisfactory results, for refinement of estimating techniques, unfortunately, is not an adequate substitute for reliable source materials*" (p. 70). [Emphasis supplied.]

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[1] Prepared by Solomon Barkin, research director, Textile Workers Union of America, in cooperation with the CIO department of education and research.

In describing its sources and methods of estimating, the National Income Division of the Department of Commerce notes that "information for estimating the 'business' segment of the income of unincorporated enterprises * * * has been generally fragmentary. Comprehensive data are lacking except for 1945 and 1947."

As a result, estimates have been made on the basis of all sorts of ingenious techniques, involving broad assumptions with regard to the relationships between total industry receipts and receipts of unincorporated enterprises and between corporate profit ratios and unincorporated profit ratios; interpolations for long periods between years for which actual data are available; extrapolations for even longer periods beyond benchmark years by means of linear regressions of doubtful validity; and numerous adjustments to force disconcerting deviations from assumptions to conform to the judgment of the estimator.

The Commerce Department's National Income Division admits that "the source materials for estimating the income of unincorporated nonfarm businesses have been generally unsatisfactory." Moreover, the few data which are available are "compilations from unaudited tax returns" and are, therefore, seriously deficient. Perhaps the most serious deficiency in these figures is the fact that current estimates, i. e., those made for the years subsequent to the latest available tabulation of tax returns (generally the last 2 years) "must be prepared from fragmentary and indirectly relevant data." These are generally "corporate data from sample compilations" of varying reliability. Implicit is the assumption that the past relationship between unincorporated and corporate sales and profit ratios has extended into the current period. When this assumption proves invalid (as it did in each revision analyzed by the National Income Division in the above-cited supplement), the estimates are substantially incorrect. Thus, when the 1945 Bureau of Internal Revenue tabulations of sole proprietorships and partnerships became available in 1949, they necessitated an upward revision of 12 percent in the Division's previous estimate of the income of unincorporated nonfarm business and professional enterprises for 1945. At the same time, the Division raised its estimate of the 1947 income by 1 percent; however, a year later, when a similar Bureau of Internal Revenue tabulation covering 1947 became available, the Division had to reduce its previous estimate for 1947 by 14 percent. Obviously, a series of current estimates which is subject to such extensive revision each year cannot serve as a firm basis for analyzing the functioning of the economy.

Reliable current data on the income of unincorporated nonfarm business and professional enterprises can be compiled only if the Government requires each proprietor and independent professional person to file current reports on his income and expenses. Such reports can be made simple so as to avoid imposing excessive burdens upon respondents. However, to be effective, they must be made compulsory.

CORPORATE ENTERPRISE

While the availability of tax returns under the corporation income-tax law makes the data underlying the estimates of corporate profits more reliable than those of unincorporated enterprises, many of the same difficulties are involved in estimating current corporate profits. This is due to the lag of over 2 years in the tabulation of corporate income-tax returns by the Internal Revenue Service.

The 1951 edition of the National Income Supplement of the Survey of Current Business, published by the Commerce Department, notes the following deficiencies in its recent estimates:

1. Differences between definitions of profits, Federal tax liability, and dividends in the Internal Revenue Service tax returns and in the quarterly survey of manufacturing corporations, published by the Federal Trade Commission and Securities and Exchange Commission. The latter source is used as the basis for extrapolating profit estimates of manufacturing corporations for the more than 2-year period which elapses before tax returns are tabulated.

2. In addition to differences in definition between the two sources, there are differences in concept between the Department of Commerce and both sources with respect to capital gains and losses, gains and losses from sale of noncapital assets, domestic and foreign dividends received, foreign income tax on branch profits, renegotiation refunds, emergency amortization acceleration, war losses, etc. While these differences in concept may be valid for the purpose of compiling the national income, they inevitably introduce the potentiality of substantial error, since many of the adjustments made by the Department of Commerce

are "made by use of estimated rather than reported values." In 1947 the gross total of estimated adjustments to the total corporate profits before tax from tax returns amounted to $3.6 billion. For the current 2-year period the Department of Commerce finds it impossible to adjust the FTC-SEC series for the above-mentioned differences in concept, and this "inevitably introduces some error into the estimates."

3. With regard to banking, transportation, communications, and public utility corporations, the Department of Commerce relies on data reported to Federal regulatory agencies to extrapolate from internal revenue tabulations. The Department notes that "in some cases, there are important differences in concept or coverage. These discrepancies affect the level and movement of the extrapolator series, and result in errors in the estimates based on them." An indication of the size of these errors is given by the fact that the 1947 estimate of total corporate profits for those industries extrapolated by regulatory agency data was 9 percent off from the figure later reported by the Internal Revenue Service.

4. For the remaining industries (which accounted for 33 percent of total corporate profits in 1947) the Department uses the company reports published in Moody's Manual of Industrial Securities and "miscellaneous inadequate data." The first source is deficient "since in general only large corporations can be included." The second is even poorer, of course, since the absence of adequate data requires extrapolation "by tenuous procedures involving, in general, indicators of total sales adjusted to allow for probable changes in profit ratios." A measure of the deficiencies in these methods are the percentage changes made in the profit estimates for 1947 when the income-tax tabulations became available in 1950; the average change for industries extrapolated by use of published company reports was 10 percent and for those extrapolated by "miscellaneous inadequate data," the error was 31 percent.

It is apparent therefore that a drastic revision in the methods of compiling current corporate income data is required in order to provide reliable figures in this vital sector of the economy. As was suggested in connection with unincorporated enterprises, we recommend requiring all corporations to file current reports on income and expenses. This is the only way of overcoming the otherwise insurmountable obstacles to arriving at reliable data in this field.

FINANCIAL REPORTS OF FEDERAL TRADE COMMISSION AND SECURITIES AND EXCHANGE COMMISSION

In the absence of complete enumerations of corporate and unincorporated enterprises, the data made available in the quarterly reports of FTC and SEC on manufacturing corporations are invaluable aids in appraising the current operations of industry, its financial status and the distribution of income, surplus, assets, liabilities and stockholders' equity by size of firm. These data are based on samples and are therefore subject to error. They are also limited in their coverage as well as in detail. With improvements in sampling, coverage reporting, statistical breakdown, and timing, the reports can contribute greatly to our understanding of the economic scene.

a. Sampling

In 1952, when the FTC-SEC quarterly financial report for manufacturing corporations was revised, the Office of Statistical Standards of the Bureau of the Budget noted that "a major difficulty in carrying out a probability sample survey of this type has been the problem of insuring coverage of the current population of firms in each industrial or other class of corporations. The problem has two facets of bringing into the statistical program firms representative of the new manufacturing enterprises, and of reflecting the decline in aggregate activity corresponding to those firms which go out of business each quarter. Difficulties arose in both of these aspects of the problem of keeping the FTC-SEC sample current, which on balance led to a progressive understatement of financial results from 1947 to 1951."

As an indication of the size of this understatement, we note that the revised total net profit before Federal income and excess-profits taxes for 1951 was 6 percent greater than under the old sample. However, for corporations in the smallest asset-size class (under $250,000) the revised net profit before taxes in 1951 was 118 percent greater than under the old sample.

While the new sample instituted in 1952 was "designed to achieve and maintain currency in the representation of the universe of manufacturing corporations," the size of the changes necessitated by the 1952 revision suggests the

advisability of periodic review of the sample. Moreover, firms which were inactive in 1949 were not included in the new sample and consequently, those which have since become active are not represented in the estimates. In order to take into account all of the various changes which have taken place in the past 4½ years, a new sample is imperative. This sample should include at least 16,000 corporations instead of being limited to a subsample of 8,000 as was required by budgetary limitations in 1952. According to FTC-SEC, "a total reporting group of 16,000 corporations was designed to produce the best possible estimate with respect to the item of net profit before Federal income and excess-profits taxes for all United States manufacturing corporations."

b. Coverage

The FTC-SEC reports at present are limited to manufacturing corporations. In 1952 nonmanufacturing corporations earned $17.2 billion before taxes, according to the Department of Commerce, or 44 percent of total corporate profits before taxes.

We have noted above some of the deficiencies in the Commerce Department National Income Division's estimates of profits in nonmanufacturing industries which result from the lack of data comparable to the FTC-SEC series for manufacturing corporations. This lack should be remedied by immediately extending the FTC-SEC sample to cover as many nonmanufacturing industries as possible, certainly the major ones for which data from other sources are clearly inadequate, viz, wholesale and retail trade and mining.

c. Reporting

Unlike the tabulations of the Internal Revenue Service and the Department of Commerce, the data reported by the corporations are accepted by FTC-SEC as long as they do not deviate from "standard accounting." No attempt is made to adjust the reported figures to make them conform to a uniform concept of net income. Moreover, no attempt is made to insure that a particular period's operations are reflected properly in each firm's report. Income and expenses of significant amounts that were applicable to prior periods' operations and special reserves of a contingent nature should be treated as surplus credits or deductions, and the reported net income increased or decreased accordingly. Similarly, extra depreciation charges due to accelerated amortization programs or special charges to cover replacement cost instead of original cost, should be treated as surplus deductions.

d. Statistical detail

The amount of detail in which financial statistics are available largely determines their usefulness. While overall figures on sales and profits serve a purpose, they cannot form the basis for the kind of searching analysis which is required to understand the complex functioning of our economy. For this reason it is of utmost importance that financial statistics be published in sufficient detail to enable the economist to diagnose the causes and effects of current economic developments. Unfortunately, the FTC-SEC series do not fill this essential requirement.

(1) *Cost of goods sold.*—The FTC-SEC report gives no breakdown of the cost of goods sold. This is a most serious deficiency since "cost of goods sold" includes all of the manufacturing costs (materials, labor, overhead) and divergent movements among these components are hidden by the movement of the total. Without a breakdown of manufacturing costs, it is impossible to gain adequate insight into the cost-price-profit relationships which are determining prospective production and investment policies. These data are therefore crucial to an understanding of the functioning of the economy. Their availability would aid immeasurably in fulfilling the purpose of the Employment Act of 1946, "to promote maximum employment, production, and purchasing power."

As a minimum, we recommend that the FTC-SEC report contain, on an annual basis, the following breakdown of the cost of goods sold:

(*a*) Materials
(*b*) Production labor
(*c*) Payroll taxes (including social security taxes)
(*d*) Depreciation
(*e*) Other

Additional material should be compiled annually to include data on repairs and maintenance, corporate taxes (other than income), research and development expenses and any other major items of manufacturing cost.

(2) *Selling, general administrative expense.*—Like the cost of goods sold category, this classification combines several elements of business expense which require separate attention for an understanding of current developments. A breakdown at least annually, into the following groups would be significant:

(*a*) Advertising and publicity expense
(*b*) Other selling expense
(*c*) Compensation of officers and directors
(*d*) Other

(3) *Utilization of capacity.*—The degree to which capacity is utilized is one of the most important factors affecting cost, price, and production policies. Yet, no information is available in the FTC-SEC report on this vital subject. Provisions should be made for compiling data on the capacity available for producing each major type of manufacture and for reporting the proportion of such capacity which is currently being utilized. This information would be of great value in diagnosing present and prospective trends in production, prices and profits.

(4) *Distribution of profit rates for each industry by asset-size class.*—The FTC–SEC report furnishes distributions of profit rates by industry and by asset-size class but there is no cross classification showing the distribution by asset-size class for each industry. This is a serious deficiency since analysis of the problem of business concentration requires an examination of the experience of particular industries rather than an overall view of all manufacturing corporations. Shifts occurring within individual industries are obscured in the overall figures.

Additional detail for each asset-size class would also make the data much more meaningful. Thus, for each industry, a percentage distribution of the rates of return for each asset-size class would permit a detailed comparison to be made of the relative profitability of the various-sized firms. This would be a great step forward in the analysis of the problem of business concentration.

e. Timing

The lag of more than 3 months which occurs between the end of the quarter and the publication of the FTC–SEC report covering that quarter impairs the usefulness of the report. For the data to serve in current policy planning and formulation, it is essential that this time lag be reduced. Economic variations are too dynamic to permit such delays in analysis. Corrective action must be taken on the basis of available information; consequently the effect of the failure to publish financial statistics for more than 3 months is to force administrative officials to act without the benefit of these statistics.

If it is not possible to publish the final report for each quarter within a month of the ending of the quarter, then a preliminary report should be issued at that time, subject to later revision. This is the practice with regard to many other statistics published by the Federal Government, e. g., the Federal Reserve Board index of industrial production and the Bureau of Labor Statistics estimates of employees in nonagricultural establishments. This practice works well in these cases and it is recommended that it be adopted for the FTC–SEC reports.

DEVELOPMENTS IN THE GOVERNMENT PUBLICATION OF BUSINESS FINANCIAL STATISTICS

Several regularly appearing publications on business financial statistics have been eliminated in recent years. The gap in available data in this area of economic information have, therefore, been widened, rather than narrowed.

Among the Government publications on business and financial statistics eliminated in the past several years by the Securities and Exchange Commission are:

1. Survey of American Listed Corporations, Data on Profits and Operations. This regular annual publication was eliminated in 1948.
2. Quarterly Sales. This publication which dealt with sales of all registered corporations, except public utilities, has been eliminated.
3. Quarterly Financial Report on Wholesale Corporations, which appeared temporarily, has been eliminated.
4. Registrants and Subsidiaries. This publication, which was issued every 3 years, has been eliminated; it dealt with the extent and degree of financial control within the corporate sector of the economy.
5. Quarterly Report on Investment Companies. This report on the assets, tradings, etc., of investment companies has been eliminated.
6. Costs of Flotations. This annual publication as well as several others dealing with the securities markets have been eliminated.

The elimination of the above-mentioned publications and others, as well as the reduced staffs of the economic research divisions of the Government agencies involved, have resulted from cuts in appropriations and policy changes of the Government agencies.

If the Congress and Government agencies are to help add to the available information on business financial statistics, it is essential that the agencies and their appropriate divisions receive sufficient funds to hire and maintain a staff of adequate size and competence. Furthermore, it is important that the Members of Congress and the administrative heads of the Government agencies understand that the collection and publication of business financial statistics is a public service designed to fortify our knowledge of the operations of the national economy. The collection and publication of business financial statistics is not a device for harassing businessmen, but rather a means of shedding light for all of us, including the business community, on areas of economic activity. The support of the Congress and of the heads of the Government agencies is required if the area of our knowledge of business financial statistics is to be enlarged and strengthened as it should be.

One step in the direction of developing more adequate business financial statistics would be the reinstatement of the above-mentioned publications that have been eliminated in recent years.

CONCLUSION

The report of the Joint Committee on the Economic Report on Current Gaps In Our Statistical Knowledge (1948) took note of the need for expanding our information on the financial trends of business in the following words:

"Among the factors in economic development about which we need more complete and current information are the financial trends of business. Adequate business financial statistics would provide current data on industry totals, giving an effective summary measure of the current financial status of each industry; current data on operations of business by size of business, showing how small, medium-sized, and large business units are faring; and information on business concentration."

We are submitting the above comments on the deficiencies of current statistics in this field and specific suggestions for improvements in the hope that these gaps can be closed in the immediate future.

WEST VIRGINIA UNIVERSITY,
COLLEGE OF COMMERCE,
Morgantown, W. Va., July 8, 1954.

Dr. GROVER W. ENSLEY,
Staff Director, Committee on the Economic Report,
United States Congress, Washington 25, D. C.

DEAR MR. ENSLEY: State agencies throughout the country publish a considerable number of reports and documents on a variety of social and economic matters. By and large the information is the product of the regulation of industries and the administration of tax laws, welfare, and other services. Since each State carries on one or more activities peculiar to itself, some of the information it thereby made available will not be published by other States. A large portion of the information, however, is of a sort published by other States, and may be useful in conjunction with the comparable information of those States.

A feature of the publications of many States is the poor quality of the data and the low standards of presentation. In many cases, for reasons which need not be developed here, material is presented which can serve no useful purpose. At the same time other information which is readily available to the States, and which can serve a useful purpose is not published. Moreover, some of the potentially useful information which is available is presented in such a garbled and confusing manner as to limit their usefulness for analytical purposes.

Persons who have had occasion to use published materials of State agencies are painfully aware of these difficulties. These same persons, however, are the first to appreciate the wide variety of useful purposes the materials can serve if materially improved in certain ways. Among those who can profit from an improvement in the character and standards of these materials are the following: State governments, Federal agencies, chambers of commerce, bureaus of

business research, social scientists at the universities, and many private research organizations. The uses to which this rich source of information can be put are too numerous to mention.

In addition to the need for improving the character and standards of these materials, there is room for integration and coordination among the agencies of the various States in the type of information gathered, and in the manner of presentation. At the present time, there is to my knowledge no agency engaged in this work on a broad scale.

It is hardly likely that these shortcomings in the publication of State governments will be materially improved within a reasonable period of time, unless State agencies are given much-needed encouragement and assistance to do so. A Federal agency, such as the United States Bureau of the Budget, is in a position to contribute materially to the improvement of this situation. A positive program to achieve these ends initiated by the Bureau of the Budget would include the following broad objectives:

(1) Encourage the use of the social scientists at the universities, many of whom have national reputation in their respective fields, to consult with and help to raise the standards of the various reports and documents issued by State agencies.

(2) Stimulate a critical reexamination of all the information issued by these governments with the view to eliminating useless material, and adding other material for which a definite need exists. A large number of groups within the States, as well as a number of Federal agencies, would undoubtedly wish to participate in such a program.

(3) Develop interstate cooperation in the integration of comparable data and in the development of more uniform standards and methods of presentation.

Very truly yours,

LEO FISHMAN,
Professor of Economics and Finance.

NATIONAL SECURITIES & RESEARCH CORP.,
New York, N. Y., July 9, 1954.

Hon. HENRY O. TALLE,
Congress of the United States, Washington, D. C.

DEAR CONGRESSMAN: As managers of a mutual-investment fund with over 80,000 shareholders in all parts of the country, we would like to submit a few observations to your Subcommittee on Economic Statistics prior to the hearings scheduled for next week, as suggested in a Joint Economic Committee release dated June 16, 1954.

The Department of Commerce figures on manufacturers' sales, new orders and unfilled orders would be more useful to us if they could be broken down in more detail by industries. We realize that manufacturers are reluctant to disclose such information unless they are assured that only aggregate figures will be used, and only such aggregates as will effectively conceal the position of individual companies. But not all industries are so concentrated that one could infer the position of an individual company from the aggregate for the industry. The categories in the breakdown furnished at present are too broad to be of much use.

The Federal Reserve Board's annual survey on consumer finances is so valuable that one can only ask for more of the same. In this connection, however, the figures on liquid asset holdings, which appear in the July issue of the Federal Reserve Bulletin, would be more useful if they could be furnished on a quarterly basis. Also, it would be of interest if holdings could be broken down by income groups, and geographically.

Finally, a few general observations: In most matters promptness is more essential to us than accuracy. Trend is what we are primarily concerned with, rather than precise figures. Also, we think Government economists could do a better job of interpreting their statistical findings if they are given more authority to exercise their judgment in their press releases and publications, even if they must occasionally do so on the basis of fragmentary data. We do not expect them to do our job (of interpretation) for us, but anyone who compiles a set of figures usually learns a good deal more than can be summed up in the figures themselves, and such knowledge (or views) should be made available to the public.

In closing, we would like to pay our respects to the many able and conscientious economists and statisticians in Government agencies who are doing such an outstanding job of keeping businessmen and public officials informed on economic conditions. We believe the value of their service to the country far outweighs its relatively moderate cost.

Respectfully,

HENRY J. SIMONSON, JR., *President.*

JULY 13, 1954.

STATEMENT OF SAMUEL G. BARTON, PRESIDENT, MARKET RESEARCH CORPORATION OF AMERICA

Mr. Chairman and members of the committee, I have been invited through your staff director to submit for the record my statement with respect to the applicability of the National Consumer Panel, the National Retail Audit, and special wholesale inventory systems, as conducted by our company, as these facilities could apply to the measurement of certain economic statistics.

These consumer and trade measurement systems, originally created to provide high speed marketing reports, now seem to offer an economical, high speed and flexible facility for filling some of the gaps in economic statistics which have been clearly outlined by your witnesses during the past 2 days.

Market Research Corporation of America maintains a continuously reporting sample of approximately 5,800 dwelling units, known as the National Consumer Panel. These families are compensated by us to keep daily records of their expenditures for a selected group of commodities, with reports of weekly expenditures being forwarded to our statistical production unit each week throughout the year. Our company also conducts each quarter inventories of selected commodities in a sample of retail stores, and periodically conducts special inventories at the consumer, retail, and wholesale levels. The annual cost of these operations is in excess of $2 million a year. This basic cost is now being borne by some 60 to 70 manufacturers, various Federal and State agencies, and commodity and trade associations. To date, these series have been employed primarily for marketing purposes but it now appears that these facilities offer existing flexible machinery for supplying some of the needs of economists. It is likely that several additional series can be added to these facilities at low cost and with no basic change in technique. Other series might also be supplied by these facilities with modifications of techniques which would be economically quite feasible and compatible with the present usage of these facilities.

For example, other witnesses have indicated a need for a representative series on consumer rentals. This could be economically obtained monthly with no lag, from the several thousand rent payers in the consumer panel.

Home repairs and automotive repairs could be reported quarterly and with a lag of approximately 10 days.

Purchases of durables and soft goods for cash and through time-payment systems could be reported quarterly with a lag of about 30 to 45 days. To provide the greatest reasonable accuracy in such a series it would be beneficial to reinforce the consumer-panel technique by an annual, semiannual, or quarterly inspection or audit of the family's records and inventory through personal visits of a field auditor. Such a combination of daily recording on the part of a sample of families reinforced by the assistance of periodic audits of a field staff would, in my opinion, provide the most accurate estimates of these economic factors.

The idea that so-called private sources can be used advantageously should be heartening to your committee which has shown a balanced concept between the economists' broad need for statistics and the values of economy and rigorous budgeting.

I would like to direct your attention to a very important statement in the testimony of Mr. Donald R. Belcher, Assistant Director of the Bureau of the Budget, during the opening session of these hearings.

Mr. Belcher said: "As these needs for statistical information have increased, the role of the Federal Government in providing them has also become larger and that trend is likely to continue. At the same time, in its function of promoting the national economy, the Federal Government should also encourage and utilize to the maximum possible extent the statistics collected and made available by private organizations. Many privately collected series of data are now used by the Government and by private groups other than those who produce

them, a practice which will doubtless be expanded as more private series of high quality become available. We believe that this development should be encouraged to the end that the Federal Government will not itself assume responsibilities that can more properly and more economically be borne elsewhere."

There has in the past been some feeling on the part of Government economists that statistics collected by private industry should be handled with reservation and at least extra caution.

While this point of view may be well advised when figures are presented by private industry in the interest of influencing legislature or executive action. I believe that Mr. Belcher is on sound ground because during the past several years, Government departments and agencies, notably the Department of Agriculture, have effectively contracted with professional marketing research firms to supply figures which have in turn been published by the Federal Government. These series have been supplied at savings of perhaps several millions of dollars to the taxpayer and in each instance the methods and interpretations have been subject to the same controls as to method and quality as required by the Federal agencies were these figures for these purposes directly collected by an expanded staff of Federal employees.

Our services have been employed for certain Department of Agriculture series, under the direction of Mr. O. V. Wells, and I would like to submit that the Bureau of the Budget in each instance, I believe, discharged its duties well in requiring the highest standards of research work under these contracts. In fact, the entire operations of Market Research Corporation of America have, in my opinion, been vastly improved and made more accurate because of the methodological research and control encouraged and demanded by the Office of Statistical Standards of the Bureau.

Thus I believe that the interests of the people have been well served where Government agencies have been able to take advantage of the facilities of private organizations with a gain in economy and speed in these instances without sacrifice in quality.

I do not propose to you that professional research organizations can beneficially take over the collection of any substantial part of the existing Federal statistics, but I do believe that many of the gaps and unfilled statistical needs which have been described to you during these 2 days can be filled with the assistance of existing marketing research machinery such as we conduct and thereby conserve funds which I feel are so badly needed for more complete analysis, interpretation, and coordination of these series by Federal, State, educational, and private economists who must assist the planning and decision-making roles in our economy.

May I assure you that our company, and I believe all professional marketing research firms, are ready and anxious to lend the best professional and scientific assistance they know how.

I must reemphasize the note of confidence that has been voiced by many in the objectivity of the Government statistician and believe further that you can find the objectivity among the statisticians of industry together with a vigor and speed of action that is brought about by free competitive enterprise.

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